



**UC Davis  
Information and  
Educational  
Technology  
May 2002**

**Report to the**

**JOINT  
OPERATIONS  
GROUP**

**Expanded Report**

## CAMPUSWIDE INFORMATION TECHNOLOGY POLICY AND PLANNING

### New Business Architecture Updates

#### NEW BUSINESS ARCHITECTURE TEAMS FORMED, PROJECTS MANAGER RECRUITMENT UNDERWAY

The New Business Architecture (NBA) Initiative was officially launched on our campus last Fall with the formation of an NBA Steering Committee and Implementation Workgroup. In the planning phase, the focus of the UC Davis NBA Team has been on defining an organizational structure (with representation from major departments and administrative computing system owners), prioritizing goals, and identifying major NBA-related technology projects. The second phase will focus on inventorying academic and business processes and identifying those that should be integrated into the portal.

UC Davis is actively recruiting a project manager to provide direction and project oversight to the New Business Architecture Initiative. The position is open until filled. A review of resumes will begin on June 14, 2002. See the job announcement and position description at <http://nba.ucdavis.edu/spotlight.cfm#mgr/>.

#### NBA INFRASTRUCTURE PROJECTS UNDERWAY

A number of projects are underway to build a solid, coordinated technology infrastructure, capable of supporting UC Davis NBA goals. These projects include:

- **Enterprise directory and registry services:** This project has two components: the common registry of person identities and the enterprise directory of authoritative attributes. The project builds on the advanced technology project that investigated what it would take for the campus to implement an enterprise directory. (<http://vpiet.ucdavis.edu/advancedprojects/projects.html#eds>) The project team is focused first on the creation of the person registry that will provide a central authority for the unique and unambiguous identity of persons. The project will identify the sources of person information for the campus community and develop the processes and procedures for integrating these sources into a single architecture for managing these identities for campus computing systems. The second component of the project is an LDAP directory for the campus. The directory will provide common authoritative attributes for campus computing systems.
- **Common authentication architecture for the campus**
- **Workflow infrastructure (to support enterprise portal applications)**
- **Portal reliability and performance**

See <http://vpiet.ucdavis.edu/advancedprojects/> for more information on these projects.

#### NBA BUSINESS PROCESS IMPROVEMENTS

The first of several planned business process improvements were implemented in January when DAFIS and PPS decision support channels were integrated into the MyUCDavis portal. A FedEx online ordering system is also planned for the near future.

#### NEW COURSE MANAGEMENT FEATURES

A new MyUCDavis feature (GradeBook module) has been released, and other features (the Self Quiz Builder and the web-based email program) are being finalized. The GradeBook module was released in Winter Quarter 2002, allowing instructors to select modes of grading, define grade weighting, and post grades to the Student Information System. So far, 278 gradebooks have been created.

The Self Quiz Builder module is being designed with the help of several faculty. The module, integrated with MyUCDavis course management, will allow instructors to create quizzes and tests for print or online. The Quiz Builder offers the choice of various quiz question-answer formats including matching, fill in the blank, and essay questions. The module will connect directly with the Student Information System to retrieve real-time course and student data. Students will receive immediate feedback while taking quizzes as well as final quiz results.

The Web-based email program is being enhanced to take advantage of single sign-on authentication. Users will no longer have to re-enter their Kerberos password if they have already logged on to MyUCDavis.

Additionally, the email program is being modified to improve usability and be more consistent with the overall look and feel of the portal.

#### INTEGRATION OF ONLINE COURSES

**Mediaworks is working closely with the MyUCDavis portal team to integrate online courses with the MyUCDavis portal without requiring additional passwords and usernames.** MyUCDavis-defined Guests, CourseBuilder proxies, and Nicknames are some of the common data being shared.

More online and e-commerce services are planned for the coming months.

To access MyUCDavis, visit <http://my.ucdavis.edu/>. Guest access is available to non-UC Davis affiliates.

#### IET CO-SPONSORED SUCCESSFUL PORTAL TECHNOLOGY EVENT

**On Friday, March 22, a special event brought together a unique combination of individuals, from technologists to campus administrators and users, to discuss the growth, features, and future of enterprise portals.** The talks were given on campus by Howard Strauss, a noted expert on portal technology. Over 120 people attended the event, including a few representatives from other UC campuses, including Berkeley, Merced, and Santa Cruz. The event was co-sponsored by Information and Educational Technology and the Office of the President. See the PowerPoint presentations at <http://ietsymposia.ucdavis.edu/portals/>.

#### SPECIAL ISSUE OF IT TIMES ANNOUNCES NBA INITIATIVE

**The Winter issue of the *IT Times* (IET's newsletter) was an 8-page, full-color edition on the New Business Architecture Initiative at UC Davis. The special issue (<http://ittimes.ucdavis.edu/winter2002/>) provides a comprehensive overview of the NBA and the enterprise portal, highlights the NBA goals and structure, and features some of its components (e.g., business, e-commerce, course management tools, technology development and planning team).** A timeline was also developed to illustrate the evolution over the last few years of the MyUCDavis portal. Diverse voices, from instructors to technologists, were invited to share their views and/or contributions to the ongoing portal development efforts.

## Communication-Related Policies

#### ELECTRONIC COMMUNICATIONS POLICY ADOPTED

**UC Davis adopted its own version of the Electronic Communications Policy on March 29, 2002. This policy replaces the campus email policy and implements guidance from the Office of the President. The UC Davis policy has significant implications for the campus as it addresses all forms of communications that use an electronic medium. This includes email, instant messaging, telephone, the Web, and other electronic media.** The campus policy includes additional provisions not included in the UC Electronic Communications Policy, such as the campus computer and network acceptable use policy provisions and a new policy section that outlines the roles and responsibilities of system administrators. To address specific elements of the new policy, the campus is also working on separate policies related to mass communications and to the Web.

To view the policy, visit <http://www.mrak.ucdavis.edu/web-mans/ppm/310/310-16.htm>

Recognizing that the new policy has broad implications for the campus, IET is developing an inventory of those implications and identifying areas where interpretive guidelines and procedures need to be drawn up. In addition, the Postmaster and other technology personnel offer classes on email liability and email essentials.

#### MASS COMMUNICATIONS POLICY

**The campus is working on a policy for mass electronic communications.** The policy will address issues related to unsolicited email and provide guidelines for appropriate use of electronic resources for mass communication purposes. Both the UC-wide and UC Davis Electronic Communications Policies define spam as unsolicited and unwanted communication, and an abuse of computer and network re-

sources. The campus, however, has legitimate interests in being able to communicate with campus groups as well as the entire campus community. The policy will provide procedures and guidance in these areas.

#### **WORLD WIDE WEB POLICY**

**The campus is completing its drafts of a policy to address specific issues and procedures for communications associated with the Web.** The policy addresses accessibility of Web pages, privacy of information collected through Web pages, and defines appropriate information to be posted on UC Davis Web pages. The draft policy provides guidance for official UC Davis Web pages and departmental Web pages. It also addresses the use of UC Davis computers and networks for personal and affiliated Web pages as well as the conditions for their presentation.

The World Wide Web policy is being developed by the UC Davis Office of Public Communications in consultation with Information and Educational Technology (IET).

## **Student Computing Ownership Expectation**

#### **STUDENT COMPUTING OWNERSHIP WORKGROUP UPDATES**

**The Student Computing Ownership Workgroup is reviewing the Student Computing Ownership Expectation program implemented last fall in order to make recommendations for the 2002-3 academic year.** UC Davis will no longer provide pre-installed software, since the vendors are unable to reliably produce the images for one-off purchases. The workgroup is investigating whether to recommend specific brand models of machines or simply general specifications that all machines should meet. See <http://computerownership.ucdavis.edu/>.

## **INFRASTRUCTURE HIGHLIGHTS**

### **Communications Highlights**

See the Report to the Communications Planning Group ([http://iet.ucdavis.edu/pubs/CPG/CPG\\_05\\_02.html](http://iet.ucdavis.edu/pubs/CPG/CPG_05_02.html))

### **Implementation of Security Framework**

#### **NETWORK ATTACKS ON THE RISE**

**The campus' central computing help desk has dealt with over 500 virus issues during April compared to a monthly average for 2002 of 64.** The workload associated with virus attacks has heavily impacted not only the help desk, but also the Data Center, NOC, Postmasters, Student Housing, and Student Judicial Affairs. These groups have been collaborating to revise the procedures for account suspension for cases involving attacks through modem banks.

#### **ANTI-VIRUS SOFTWARE FOR CAMPUS EMAIL SERVERS**

**Information and Educational Technology is preparing to acquire and implement anti-virus software for email messages and attachments transmitted via the central campus email system. Moreover, use of the campus license for the new anti-virus product will be made available to UC Davis campus units at no additional software cost.**

#### **ADVANCED TECHNOLOGY PROJECT (ATP) ON INTRUSION DETECTION**

**This project, which will provide campus recommendations for the use of network and host-based intrusion detection systems, is nearing completion of its research into the types, advantages and disadvantages of network and host intrusion detection systems. As part of the final research phase, the project members will examine the use of host firewalls and intrusion detection systems within a higher education environment. See <http://vpiet.ucdavis.edu/advancedprojects/>**

## **One-Card System for Campus**

**IET recently participated in an executive committee sponsored by the Office of Administration and Office of Student Affairs to assess the viability of implementing a one-card system on campus.** Campus cards are used for various purposes, including identification for library privileges, entry to campus events or services, building access, and debit purchases. Though multiple cards are traditionally used for these services, a single card that serves multiple functions would offer convenience for users, operational efficiencies, enhanced security, and an improved campus image. The draft report suggests strategies for further development of the one-card concept. The report will be submitted to the Provost's Office for review.

## **Administrative Unit Review For Select Units in Information Resources**

**A committee has been formed to conduct an Administrative Unit Review of Information Resources, a department of Information and Educational Technology. The focus of the review is on client services, (IT Express, Technology Support Program, Software License Coordination, Desktop Systems, and Computer Accounts Administration.)** The final report of the review is slated for late summer.

## **IET Receives Authority to Classify Programmer Titles**

**Vice Provost John Bruno and Assistant Vice Provost Dave Shelby have recently been delegated authority for classification decisions regarding Programmer and Programmer-Supervisor titles within Information and Educational Technology (IET).** IET has worked closely with the campus Compensation/Classification Unit for several years on such actions. Bruno and Shelby will be supported in this effort by an IET Advisory Committee that includes management representatives from each of the IET departments. Support to the Advisory Committee will be provided by the IET departmental Human Resource Coordinators. The Advisory Committee is in the process of conducting orientation meetings with representatives of the Compensation/Classification Unit.

## **Managing Technology Pilot Program**

**In March/April of 2002, under the sponsorship of UCD Staff Development and Professional Services, nearly 40 campus managers participated in a 3-day pilot course on Managing Technology for the Non-Technical Manager. The course was geared to provide campus managers with knowledge, skills, and tools to manage the technology component of their units.** Various areas of campus made significant contributions of expertise and participation in the program along with external consultants who provided overall program development and facilitation. Campus contributors included staff from University Extension, Entomology, Foundation Plant Materials Service, LAWR, Office of Administration, IET, and Human Resources. Staff Development is using the feedback from the original pilot participants to refine and focus the material for potential further offerings.

## **ACADEMIC COMPUTING HIGHLIGHTS**

### **Mediaworks Celebrates Second Anniversary**

**As Mediaworks completes its second year, a request for permanent funding is being developed for consideration by the Information Technology Policy Board.** Mediaworks was formed as a new department of Information and Educational Technology two summers ago to strengthen support of instructional technology. Funding was allocated for the first two years. Recent accomplishments and highlights follow.

#### **EDUCATIONAL TECHNOLOGY PARTNERS PROGRAM COMPLETES FIRST QUARTER**

**The Educational Technology (ET) Partners program, initiated last quarter, pairs a trained student with a faculty participant in an effort to incorporate technology into teaching.** The 12 pairs of faculty and students presented their finished projects in early May. The pilot program was very successful. It will continue through the Spring Quarter and will be evaluated for continued funding.

#### **MEDIAWORKS HELPS WITH VIRTUAL CHEMISTRY LAB**

**The online course Chemistry 2C Laboratory Presentations, a joint effort between Mediaworks and the Department of Chemistry, launched successfully for the Spring 2002 Quarter. The online component supplements the laboratory portion of the course, allowing 700+ students to access pre-laboratory presentations, take a pre-lab quiz and submit post-laboratory data. The online**

**component of the course is expected to free up valuable space and time for additional lab sections. Full integration with the MyUCDavis portal's GradeBook functions is planned for future online course launches.**

#### **MEDIAWORKS CREATES SIMULATED SCIENTIFIC PROCESSES FOR SCIENCE COURSES**

**The Educational Technology Group in Mediaworks used interactive graphics and animation to bring learning simulations to spring quarter courses in Cosmology and NPB (Neurology, Physiology, and Behavior).** For Cosmology, a simulation of a galaxy counter, including galaxy maps from random, real and contrived data, was designed to demonstrate the cluster-like nature of galaxies. The NPB lab simulation, including quizzes and interactive animations, leads students through fundamental information on Hemodynamics and challenges the students to control the blood flow to organs and muscles in order to maintain proper blood pressure in the body.

#### **VIDEO DISTRIBUTION COURSE PILOT**

**Professor Naomi Janowitz, who teaches Religious Studies 001: Survey of Religions, received an Educational Technology Grant through the Teaching Resources Center (TRC) to record 10 lectures in the studio and distribute these lectures to 120 students on a weekly basis. During Winter Quarter 2002, Mediaworks and Communication Resources partnered to assist Janowitz** with this general education course that introduces students to the academic study of religion. The pilot project was designed to assess the viability of various distribution methods including DVD and VHS tapes through the Hart Hall Media Lab, Davis Community Television, UC Davis' ResNet cable network, and streaming on-demand through the data network. A post-pilot survey showed that over 70% of the students used streaming technology to view the lectures while 22% preferred to view the programs at the Media Lab.

#### **9TH ANNUAL SUMMER INSTITUTE ON TECHNOLOGY IN TEACHING (SITT)**

**The Teaching Resources Center (TRC) holds its 9th annual SITT, July 15-19 on the UC Davis campus. Each year, the TRC partners with Mediaworks staff and other specialists on campus to provide a learning environment for instructors who want to learn about the latest instructional technology tools and established practices on beginning, intermediate, and advanced levels.**

Topics include images, classroom exercises, multimedia, and online teaching. Hands-on labs provide instruction in various areas from basic skills for creating computer-based class presentations and course Web pages, using MyUCDavis, to scanning and modifying images, and using sound and motion to construct multimedia modules. See <http://trc.ucdavis.edu/trc/sitt/>.

## **Classroom Technology Equipment Upgrades, Support for Instructors**

#### **CLASSROOM TECHNOLOGY UPGRADES**

**While providing general support to over 115 general assignment classrooms, the Classroom Technology Team (CTT) completed several major classroom technology equipment upgrades during the Spring quarter.** General support also included printer and A-V repair for instructional and administrative equipment. The CTT components include the Night Crew, Campus Printer Repair, and A-V Repair. Specific projects in progress or recently completed include:

- Upgrades of media equipment to six general assignment classrooms are underway to provide instructors with network connectivity and the capabilities to project Internet or other images from an array of equipment including laptop computers, VHS videotapes, or DVD's. Media capability was added to four other classrooms that did not have any previous media capability.
- In order to meet requirements to serve hearing impaired students, Assistive Listening Device were installed in five large lecture halls. These devices allow for amplification of audio signals from installed media equipment. Some solutions involve a plate that vibrates or a connection directly to hearing aids. Four additional Assistive Listening Devices are scheduled for installation this summer. CTT submitted a request to fund the purchase, and installation of equipment in 10 additional classrooms has been presented to the Registrar for approval.
- Preparation is underway for 12 classroom media equipment upgrades.
- The CTT night crew visited 717 classrooms to maintenance and/or repair activities of 3984 separate

pieces of equipment. During the quarter, 93 classrooms (81% of total classrooms) were maintained monthly.

- CTT installed various classroom media equipment in eight departmental classrooms during the third quarter, with major projects including microphone replacement, cable repair, installation of new data projectors, Polycom teleconference system test, installation of TV camera, monitor, data projector, media cabinet, and VCR.
- Upgrades were made to videoconferencing and distance-learning equipment, enabling UC Davis to meet new worldwide standards for videoconferencing. UC Davis can now use the fastest growing connection method, H.323, which is an IP (Internet Protocol) based transmission, allowing connections to be made at no cost over the Internet. This allows campus classrooms to interconnect via the Internet with the videoconference areas on campus that have similar systems. Previously, connectivity was restricted to other UC schools and locations with ISDN specific connections. As part of these upgrades and expansion plans, similar equipment will be installed in various classrooms sites so that more classrooms in the future can have built-in videoconferencing, providing opportunities for distance learning programs.

#### **SUPPORT FOR INSTRUCTORS WHO USE CLASSROOM TECHNOLOGY EQUIPMENT**

**Through the faculty "Meet and Greet" program, the Classroom Technology Team-- working with other groups in the Classroom Technology Services unit-- coordinated efforts to provide classroom technology equipment training to faculty at the start of the Winter academic quarter. The Quick Response Team continues to provide support for instructors in their use of classroom technology equipment.** During the first three days of instruction, staff met with faculty at the start of classes to offer assistance. In addition, six training sessions on the use of classroom-installed equipment were offered before the first day of instruction. Twelve faculty members were trained. Two additional one-on-one training sessions were conducted at the end of the quarter to bring a total of ten instructors scheduled to teach in mediated classrooms in Spring quarter.

The Quick Response Team continued to provide technical assistance during the quarter.

### **UC Media Directors Meeting**

**UC media directors from all of the UC campuses and staff from the Office of the President met at UC Davis on May 9 and 10** to discuss the following topics: Course Management Systems, classroom services, campuswide instructional technology, UCTV, broadband dissemination of medical continuing education to rural doctors, Digital TV transmission, Videoconferencing update, campus reports, Report on Media Center surveys, copyright issues, and 12 GHz multichannel Video Distribution and Data Service.

The group made use of the Videoconferencing Center to bring in guests from other locations.

## **ADMINISTRATIVE COMPUTING HIGHLIGHTS**

### **Development of UC Davis Information Technology Plan**

**The campus has initiated the development of a UC Davis Information Technology Plan to articulate technology goals and priorities for the next 3-5 years and tie technology planning more closely with the campus budget process. As part of this process, IET and Resource Management and Planning have requested reports from all administrative units and system owners outlining current and future technology plans and their budget implications. The reports have been evaluated, following criteria developed by IET and discussed by the Administrative Computing Coordinating Council.** This marks the first time such a campuswide technology inventory has been performed. The criteria include:

- Compliance with the campus hardware and networking standards
- Support of major UC Davis middleware and application protocols
- Integration with existing administrative computing systems
- Compliance with the campus standards for application development

Vice Provost Bruno also provided a description of the category of systems to which the administrative computing evaluations apply. These include systems that provide:

- Mission Critical business functions
- Essential information technology infrastructure
- Containment of sensitive or private data
- Mandated service to the campus.

The Office of Resource Management and Planning and IET will set up a schedule for the reports and evaluations that coincides with the campus budgeting process.

## Highlights of the UC Davis Financial Information System, DaFIS

*submitted by UC Davis Accounting and Financial Services*

- Analysis and architecture design for the rewrite of the DaFIS Accounts Receivable module is underway. Input from interested parties in administrative, service and academic units from across campus was solicited for the redesign effort. Implementation is scheduled for the first quarter of calendar year, 2003.
- Effort is underway to standardize the service unit feeds into DaFIS. Departments will have access to consistent levels of detail for their service unit charges. As the first part of this effort, two new reports were written for Decision Support. The full implementation of the standardized feeds is planned for July 2002.
- A new shipment request system for FedEx is under development. The system will integrate the FedEx online requests with DaFIS account information. The payments will be automatically generated through feeds, removing the need for departments to process documents for one of the most frequently used vendors.
- A new Storehouse inventory system is scheduled for implementation in July. The system replaces an existent internal system, with the added benefit of providing Web-based ordering for campus units.

Additional efforts currently underway include:

- Automating Revolving Bank Account Reconciliation for EFT Vendors
- Process Flow of Business Contracts & HIPPA compliancy
- General Ledger Annotation project
- Cost Transfer Data for Extramural
- Sole Source Procurement Automation
- YCAL automate travel reconciliation
- Garnishment Project (May 2002 Production release)
- Vendor EFT (May 2002 Production release)

## Banner Team Upgrades to Sun Servers

**The Banner Team upgraded to new Sun servers for development and production in April.** The team brought the new servers up without a problem. The client group is noticing much faster response from both the forms loading and database response. The Banner Team is now planning the upgrade to Oracle 9i Release 2 and Banner 5.4, which is very rich in new functional enhancements.

## Improved Telecom File Feed

**The initial development of the improved Telecom feed file from the campus to UCOP, including employee e-mail addresses, has been completed.** The file feed is being tested before being placed into production. The new file will be created from Payroll and telecom data located in the PPS Data Warehouse. A test version of the file

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contained 29,547 employee records with 73% of the employee records containing e-mail addresses, an improvement over the current feed files with only 34% of the records containing e-mail addresses. It is anticipated that the file will be fully tested and placed into production over the next two to three weeks.