

Information Technologies Activity Report

JUNE-AUGUST 2010

UD Mobile Web now available

IT Web Development (IT-WD) has announced a new service for campus—UD Mobile Web. You can now get essential UD information and services on your mobile device anytime, anywhere. If your phone has data capabilities and a Web/data plan from your carrier or a WiFi connection, link to m.udel.edu from your device's Web browser. You can also preview the smartphone version of the site from your desktop or laptop. iPhone and Android apps will be available in the near future.

The new service includes links to athletics, the bus schedule, campus maps, events, people search, the UD home page, and a special Web site designed for new students to learn about UD.

UD Mobile Web was developed using open-source software called iMobileU. Using an open-source solution, UD benefits from, and contributes to, the core practice of sharing information and experiences with other organizations that use iMobileU. This worldwide network supports best practices and continued growth in mobile technology. New services will be added to UD Mobile Web as the project develops.

UD licensing for Adobe Acrobat Pro

UD has signed a Term Site License (TSL) agreement with Adobe to give departments and institutional users access to the current versions of Acrobat Professional software. This agreement, funded jointly by the colleges and IT, provides a cost savings by reducing the per-copy cost of the software.

The software will be available from UD's UDeploy software download site later this month. We will announce the exact date of availability in *UDaily*.

The agreement will entitle all departments and employees to download and install licensed Windows and Macintosh versions of the software on UD-owned computers. These licenses are for institutional use only.

For details about this TSL, consult the Adobe Web site or contact the IT Help Center indicating "Adobe Acrobat License" in the problem description text box.

IT staff provided tech help to students during move-in days

Nearly 60 IT staff members and student employees worked in residence halls, at the IT Help Center, and behind the scenes during move-in days to ensure students could connect to our network.

The IT Help Center, open from 9:00 a.m.–5:00 p.m. on both days, referred our staff to students who needed assistance. In addition, the IT Web site contained special move-in day information for students and their families.

IT Network and Systems Services (IT-NSS) completed an extra round of testing before move-in days, which decreased technical difficulties. The IT Help Center processed several hundred calls over the move-in weekend.

Several parents commented that it was nice to have people available to get their students' "tech things" straightened out immediately: connecting to and registering a device for UDelNet, setting up printers, configuring wireless devices, auto programming TVs, removing "promotional" copies of anti-virus programs, and installing the UD-supported McAfee VirusScan program.

Planned Outages

The Human Resources (HR) and UDSIS systems will be unavailable for part of Sat., Sept. 18 for system upgrades. A reminder of these outages will be posted on the CAS sign-in page.

Security, Privacy, and Safety

Cavalier Telephone recovery site offers continuity, flexibility

IT has contracted with Cavalier Telephone (CavTel) to lease space for a backup computing site. The site can be used as an alternate processing facility in the event of hardware failure or unavailability of the Chapel St. data center.

The CavTel site features dual power feeds from two separate power grids, battery and generator backup power, and FM200 fire suppression. Remote video, climate, and server monitoring are in place to ensure services will be available when needed.

Currently, IT has 12 racks of equipment that include backup production servers, data storage for payroll, student records, and finance and departmental file servers. Any UNIX-based server at Chapel St. can be replicated at CavTel on short notice.

The disaster recovery project now includes an up-to-the-minute standby database for student, financial, and human resources data. The standby database is used to store a duplicate of the most recently applied database changes in the production environment. In addition, a static version of each of those three PeopleSoft databases reside on the disaster recovery servers and will be used as the target for the PeopleSoft application in an emergency.

IT has been testing the recovery environment. A recent exercise with the human resource environment included running a series of payroll-related batch jobs and scripts to emulate payroll processes that must continue in the event of an emergency. Future testing will include interaction with data sources outside of human resources and its PeopleSoft application and data.

The CavTel site offers flexibility of equipment placement to minimize risk and leverage existing resources. For example, because the site is connected to the campus network by a 10GB loop, existing or backup equipment can be run from it. New services are being added weekly. Future plans call for adding backup and expanded network infrastructure equipment, including name servers, a duplicate Exchange server, tape backup, and other application servers.

CASHNet selected as PCI vendor

UD has selected CASHNet as the vendor for online payments as part of UD's effort to meet Payment Card Industry Data Security Standards (PCI DSS). CASHNet is a hosted Web site used to process online credit card payments at the Automated Clearing House (ACH) on behalf of UD. Using a third party vendor for payment processing significantly reduces UD's efforts and costs for meeting PCI DSS requirements. CASHNet can be integrated with existing Web payment forms or can be used as a stand-alone product to produce online marketplaces.

CASHNet went into production at UD on Aug. 13 and has been integrated with Hobsons, the new hosted graduate admissions recruiting and application processing vendor. IT-WD and the Cashier's Office will work with campus clients to convert existing payment forms and implement new payment-collection forms.

We will keep the campus informed about the conversion and implementation as it progresses. At this point, unless contacted by the Cashier's Office or IT-WD, departments need not take any action.

Infrastructure

KACE user group formed

A cooperative effort led by IT Client Support & Services (IT-CS&S) has formed a user group with representatives from 10 campus units to deploy KACE appliances. IT-CS&S is coordinating training, support, and monthly meetings. A shared knowledge base is also being developed on Google Docs.

KACE appliances allow system administrators to deploy and manage systems remotely. Using the management appliance, administrators are able to change system settings, run scripts, silently deploy new software, and apply patches on computers anywhere on the network. In addition, a self-service portal allows users to install software from an available library. These features simplify system administrators' tasks, thereby reducing their workload. In addition, KACE appliances run as virtualized systems, thereby reducing energy costs.

Currently, UD has 500 systems connected to eight KACE management appliances: one physical system in the Library, one virtual system in Facilities, and six virtual management appliances and several virtual deployment appliances running on a pair of hosts in IT-CS&S. Another 1,850 systems are in the process of being connected. The environment is easily expandable to over 10,000 systems, so we invite other units to contact us about KACE capabilities and future adoption.

Constituent Groups and Feedback

IT Professionals Web site

IT-CS&S and the IT Help Center have updated the Web site created for IT professionals on campus. The site currently has tabs for IT news, a calendar of events, and a list of resources. As the site develops, we plan to add tools for departmental IT professionals to contribute to the site: peer-recommended resources and an online forum. The URL of the site is http://www.it.udel.edu/itprof. Contact us if you have any comments about, or suggestions for, developing the site.

Follow IT on twitter

Did you know that IT is sharing information via twitter? Follow one of our feeds for quick updates to information about IT at UD.

- @UDel_IT: General information from IT for the UD community.
- @UDelCOTW: Computer security tips and news for the UD community.
- @UDATS: Information for faculty and teaching staff (e.g., lab coordinators and teaching assistants) from IT Academic Technology Services (IT-ATS).
- @UDSakai: Information for faculty, teaching staff, and students about Sakai@UD.

Research Support

RDMS computing laboratory opens

Research & Data Management Services (RDMS) opened its redesigned research computing lab in a new location—002D Smith Hall.

The site's computers have a wide range of software not available in other IT sites. The software supports research involving quantitative and qualitative statistics, survey design and deployment, geospatial and geostatistical analyses, mathematics, and scientific graphics production.

Students, faculty, and staff working on research projects have priority access to the Windows-based computers. Specialized consulting is available from RDMS staff (usually by appointment).

The RDMS computing laboratory site is open during the same hours as the Smith Hall computing site.

UNIX classes to support research computing users

In winter term, IT-CS&S will offer a series of 10 workshops to provide basic UNIX competencies to UD researchers. Targeted mostly at new graduate students who may work on departmental clusters, the classes are also open to faculty and staff. The workshops will provide introductory material about connecting to and authenticating oneself on UNIX/Linux systems, navigating file systems, editing files, modifying the environment, using bash shell scripting, and navigating the basic C and Fortran 95 programming environments.

New programming environments for teaching and research

IT has made two new programming environments available to the campus: Dr. Racket and Python/IDLE. These environments were added to Strauss to support the more than 600 students taking CIS programming courses. This open-source software can be downloaded for most platforms.

Dr. Racket has replaced Dr. Scheme in CIS classes and is a programming environment for Racket programmers. Racket allows you to choose from several teaching and experimental languages.

A new version of Python was installed with the IDLE development environment that allows easy execution of Python commands, editing script files, and debugging. Python, combined with the SciPy scientific library, is a powerful scripting language for scientific applications.

Teaching and Learning

IT Tech Fair: Coming Soon

Following the success of the Tech Fair at the end of the Summer Faculty Institute (SFI), IT is planning another Tech Fair during the fall semester. The Tech Fair's goal is to familiarize faculty and staff with the technology services offered by UD. IT staff and other UD staff members who provide technology support will be at different stations, inviting faculty and staff to discuss the ways technology can help them, their clients, and their students.

Short informational video clips about the use of technology on our campus will be shown. In addition, faculty and staff can browse tables and booths occupied by staff members willing to answer questions about different technology services.

All technology-based UD departments are welcome to send a representative to the Fair to present a poster, video, or staff a table.

We expect to announce the date and location for the Tech Fair later this month. For more information, visit the Tech Fair Web page or contact us.

i>clickers off to a successful start

Over 5,000 students are registered in UD classes using the i>clicker polling system, more than 2.5 times the number of students using clickers in fall 2009. More than 40 faculty members, many new adopters of this technology, attended group or individual training sessions this summer. The Clickers@UD Sakai project site was developed as a central resource to exchange knowledge among campus colleagues and currently has 189 members.

A collaboration between IT-WD staff and i>clicker staff produced customized software to fully integrate i>clicker use into Sakai@UD. The software integrates registration, gradebook data, and use of i>clicker devices on laptop computers or Web-enabled mobile devices.

Preliminary feedback from faculty, teaching assistants (TAs), and students has been overwhelmingly positive, and we anticipate the adoption of this proven learning technology to continue. For more information, visit IT-ATS's i>clicker Web site.

Harrington computer site upgrade

During the summer, IT-CS&S replaced Windows-based desktop computers in the Harrington Commons computing site with Sun Ray thin client machines. The Sun Rays use a remote desktop connection to a Windows 2008 R2 server, which gives the Sun Rays the look and feel of a Windows 7 desktop computer. Students need to use a USB flash drive to save or load files. If a client forgets to log out, the computer will timeout after 15 minutes of idle time, delete files left on the desktop, and close open applications. Printing is also available through a VendPrint release station. Available programs include Internet Explorer, Firefox, Microsoft Office 2010, Maple 14, and SPSS 18.

The switch to this new equipment allows us to open the Harrington site 24 hours a day, giving students greater access to its resources, while reducing the cost of operating the site as well as simplifying site administration. In addition, because Sun Rays are very energy efficient, they reduce the site's energy consumption.

UD Capture use continues to grow

UD Capture continues to grow in popularity and utility: it is being used for recording lectures, student presentations, guest appearances, and a mixture of video from a document camera and a laptop computer. Not only does the number of classes recorded exceed last semester's count, but faculty members are coming up with their own innovative instructional applications for this technology.

One faculty member who needed to be absent at the beginning of the semester was able to pre-record his opening lectures in a UD Capture-enabled classroom and make the lectures available to his students during his absence. As an extra viewing option, his TA played the recorded lecture during the scheduled class session. When the faculty member returns to the class, no time will be lost.

Another faculty member is exploring the use of UD Capture to accommodate a student with learning disabilities. Other faculty members have received assistance from IT-ATS to record presentations at their own computer and submit them for hosting on the UD Capture video server.

It's not too late to for faculty members to sign up for UD Capture for the remainder of the semester.

UD Capture annotation feature

Faculty using UD Capture can now annotate the recordings, thereby providing an easy way for students to jump to any named "scene" within a UD Capture video. Faculty members who choose to enable video annotation can

- Trim dead air time from a video.
- Create annotation links with meaningful titles to help students locate the section of a lecture they need to review.
- Add optional notes to each annotation to provide additional information. This feature is especially
 useful in cases where the video is silent, as it is difficult for users to read and listen
 simultaneously.
- Provide students with an integrated way to take personal notes or share lecture notes with others.
- Provide lecture access in an environment that permits commenting. Commenting can be used to create a threaded discussion about your lecture or course.

Each course for which annotations have been enabled will have lecture-specific links to a UD Capture annotations page. The link opens a new browser tab or window with a list of existing annotations as well as a button to click when you want to create a new annotation.

Faculty using UD Capture who wish to use this new feature can visit this IT-ATS Web page.

Business Systems

My Blue Hen Home opens its doors

The My Blue Hen Home project started with a set of ideas:

- Send prospects to one customized Web page to conduct all their UD business,
- Let prospects use an ID and PIN created before they apply to UD, and
- Let that ID/PIN combination persist throughout their UD careers.

By collecting information from each prospective student, we are able to build a personalized, engaging My Blue Hen Home page for each prospect, applicant, or admitted student based on his or her admissions status and UDSIS indicators. For example, prospective students can review content specific to their academic interests and degree requirements as well as information about student activities and student life. In addition, as applicants, students can view what application materials they have submitted and what application materials they owe. My Blue Hen Home also provides registration forms for UD events and for updating a student's or applicant's official UDSIS record.

The project has a labor-saving component as well. Admissions staff now use a secure Web tool to process My Blue Hen Home requests and, once requests are approved, students then take responsibility for arranging their own reservations and updating their personal data. In addition to making it easier to process incoming requests, this administrative tool allows Admissions staff to customize each aspect of the portal page (e.g., announcements, checklists, major, and interest descriptions) for each target audience.

By using the ID/PIN combination from the time a student first contacts Admissions, we eliminated the use of different sets of credentials for different UD secure business transactions. In fact, the ID/PIN combination from a first contact with UD can still be used for alumni access.

My Blue Hen Home is a good example of a project developed to improve the way UD does business on the Web, maximize efficiencies, save time and money, and meet client and UD expectations. Jeff Rivell, deputy director, Admissions, called this project "transforming." In fact, Admissions is in the process of inviting 95,000 prospective Blue Hens to the site.

PeopleSoft update

In preparation for the upcoming upgrade from PeopleSoft 8.9 to 9.1, IT Management Information Services (IT-MIS) is in the process of upgrading PeopleTools for the HR system. HRDMO was upgraded from version 8.48 to 8.50 and made available for testing on May 13, while HRDEV was upgraded and made available on Aug. 6. An upgrade to HRPRD is planned for Sept.18. The RFP teams are continuing their interviews of implementation partners for the application upgrades. Hardware has been ordered from Sun/Oracle and is expected to ship on Sept. 27.

Project Closeout

The Research Office and IT-WD created an automated Closeout Report that uses a Web-enabled online process. Previously, closeouts were completed manually by department contacts running several queries, aggregating the data in a spreadsheet, and then providing the information to the Research Office.

UD's online process enables department contacts to run the standardized report format until all conditions are met and then submit the report. It also includes an "interim report" feature to allow clients to monitor their project's progress. This UD process has expedited closeout reporting, which is critical to staying in good standing with federal funding agencies. It also eliminates duplication of effort and allows departments to run prepared reports instead of assembling content manually.

This system was released to a small audience in an April pilot project and, as of August, is now available campus-wide. For additional information, see the *UDaily* article "Sponsored research closeout reporting process now automated."

Web Forms

IT-WD recently migrated Web Forms to a new environment that is load-balanced, which distributes the workload across multiple servers for better performance and provides continued service in the event that a single server ceases to function. Redirects were put in place for a seamless transition.

RFS Web Forms will use "Chart of Accounts" instead of ProCard

Since spring, IT has been working with service units on campus who use Request for Service (RFS) Web Forms, which collect requests and bill for those requests, to remove the use of ProCard for payment and instead use the Chart of Accounts. All Request for Service Web Forms have been converted to use the Chart of Accounts. No ProCard charges for these forms will be used after Aug. 1, 2010. Questions about this process may be directed to the unit listed at the top of the Request for Services Web Form. Thanks for your help in working with Procurement, General Accounting, and IT on this migration. For more information, contact Procurement at 831-2161 (or via email) or General Accounting at 831-2175 (or via email).

Student systems (UDSIS)

Hobsons graduate tools: IT-MIS recently implemented interfaces to the Hobsons Apply Yourself system, a replacement for the UD Web Application for Graduate Admission and the GRADIS PeopleSoft module. Although GRADIS will remain visible within UDSIS for several more months, it will not be used for graduate applicant review beyond the fall 2010 semester. IT-MIS wrote interfaces to download application data from Hobsons to PeopleSoft. IT-MIS is now working on interfaces that can export test score data out of PeopleSoft and into the Hobsons system. During the fall semester, Graduate and Professional Education will be holding training sessions for system users.

Financial aid awards: IT-MIS implemented the automated system for awarding Financial Aid. Award renewals, new awards, and listing of eligible candidates to assist departments in choosing recipients are now handled automatically. These processes were previously handled manually. Automation has resulted in savings of several hundreds of hours of staff time and greatly improved accuracy as well as efficiency in awarding aid to students. This is a part of the Student Services Initiative and this phase took a year to complete. Phase II is in progress for the next fiscal year.

FDP/STAR reporting

FDP (Federal Demonstration Partnership) is moving forward with STAR (Science and Technology in America's Recovery) metrics, and UD is participating in their pilot program to assess the impact of "Research Funding." As part of this effort, IT is required to submit four reports with information about Award, Individual, Sub-award, and Vendor. IT-MIS and the Research Office worked together to get these reports ready in the test environment. The STAR team validated these reports and approved submitting reports with live data. IT-MIS is currently working on getting these reports into our production environment.

In July, IT-MIS finished a project suggested by our STAR reporting. Many of the entries in our vendor file had only 5-digit ZIP codes. STAR reporting requires the full 9-digit ZIP code. We exported address fields to a service using the US Postal Service ZIP code locator and were able to change 41,900 addresses to 9-digit ZIP codes. As a result, Procurement was spared a time-consuming research and data entry project.

LAM distribution rollover

LAM distribution is an SQR process that allows control of percentage allocation of salary charges for many employees. This new feature will now automate the fiscal year update process, moving selected data forward to the next fiscal year. For example, based on user-selected parameters, rows of data with a 6/30/2010 end date will be automatically updated to a 6/30/2011 end date.

Event Production and Media Services

UMS video production studio upgraded to full HD

Over the summer, the IT University Media Services (IT-UMS) production studio was upgraded with full High Definition (HD) capabilities. Using state-of-the-art equipment, this upgrade will help IT-UMS keep pace with the video industry, allow for future growth, increased production clients, and more partnerships like the ones we currently have with WHYY and Comcast.

"Dare to be First"

Last month, IT-UMS and OCM began production of UD's first national television/video spot for the "Dare to be First" campaign. Casting and production planning occurred in August and shooting and production are currently under way.

More departments join UMS's Room View system

The IT-UMS Classroom Technology group installed new A/V technology in five rooms over the summer for a number of UD departments. More departments are finding it beneficial to have IT-UMS install and maintain the A/V equipment in their conference, seminar, and meeting rooms. When we add their new equipment to our Room View system, we can remotely monitor and troubleshoot departmental A/V systems in the same way we monitor UD classrooms.

Training Opportunities

IT-CS&S offered over 50 training sessions this summer. Most were recorded and are available for viewing at the LearnIT@UD Web site.

LearnIT@UD is expanding the services we offer to campus. In addition to offering regularly scheduled courses and online educational resources, we are now helping departments determine the IT training needs of their faculty and staff. To this end, we are available to meet with representatives from each college and department to learn what IT tools they use, how they use them, and subsequently what training will be most beneficial.

To request more information about this service, use the Contact Us form on the LearnIT@UD Web site.

IT Help Center

Self-service trouble tickets

The IT Help Center has released a new service that allows students, faculty, and staff to submit Help Ticket Requests directly to the IT Help Center as well as to check the status of tickets they have submitted. This new system offers several improvements:

- Clients will receive an email confirmation after submitting a ticket.
- Students, faculty, and staff may log in to check the status of their tickets.
- The new system also will save clients time because a client-submitted Help Ticket Request is pre-populated with the client's contact information.
- Because the ticket goes directly to the IT Help Center system without first being re-keyed by an IT staff member, the ticket gets routed to an expert more quickly.

This service supplements the other ways the UD community can contact the IT Help Center on the Web or by phone, 8 a.m. to 5 p.m., Mon. through Fri., at (302) 831-6000.

Personnel

Andrew Brett joined IT-UMS in August as a Video Production Technician II. He comes to UD from PBS Channel 39 in Bethlehem, PA where, for over 6 years, he produced, taped, and edited programming in the Lehigh Valley and Philadelphia region. He also brings added experience in live sports production to the IT-UMS team.

In August, **James Cannon** began work in IT-NSS as a Network Technician I. He brings to UD several years of experience installing structured cabling systems in the commercial business environment. James will be working on network installations.

The IT Activity Report is published 4-6 times a year. Archived reports are located at http://www.it.udel.edu/activity-reports. If you have comments, questions, or suggestions for future articles, or wish to be added to the email list announcing each new report, contact the IT Communication Group at it-commgroup@udel.edu.