

Information Technologies Activity Report

JUNE-AUGUST 2011

Self-Service, On-Demand UD Capture Recordings

As an extension of the UD Capture recording service, IT Academic Technology Services (IT-ATS) is offering a self-service recording studio in 309 Gore Hall. The room is equipped with a recording station, a microphone, and laptop computer connections. Using a special self-service interface, faculty can start and stop recordings on their own. The recording files are processed and posted to a course directory on UD's video server.

UD Capture is our classroom recording system that captures the video signal from a laptop computer (or document camera) along with the audio from a microphone. Whatever the laptop computer is being used for—PowerPoint, Web sites, or simulations—gets recorded. The video and audio sources are combined to make a video recording that can be played back through a course Web site. Typically, there is no visual recording of the presenter.

Since the Gore Hall studio uses the UD Capture system, faculty can conveniently record material they may not be able to record at home, including images from programs other than PowerPoint or handwritten information and small demonstrations captured by a UD Capture document camera.

During the first two weeks of the semester, the studio has been used for nine recording sessions. One faculty member recorded material to replace a class meeting cancelled by Hurricane Irene; another recorded an orientation to a specific course's Sakai@UD site; others have pre-recorded material for days they must miss class. Faculty can also take advantage of the convenience of the Gore Hall studio to record supplemental material, perhaps for students to review before an exam or to cover material not completed during a class meeting.

To reserve time in this studio, visit the 309 Gore Hall Web page.

High Performance Computing Cluster

As announced in the June 2011 IT Activity Report, IT is in the process of building the **UD Community Cluster**, a high performance computing (HPC) cluster funded by IT and a group of 50 faculty and research stakeholders.

Implementation for the HPC cluster passed several milestones this summer:

- We held a competitive bidding process early in the summer. The winning bid for the servers came from Penguin Computing, a respected producer of HPCs at other universities.
- Because faculty and researcher interest exceeded our expectations, we were able to order a cluster twice the size of our initial target and were able to design a more sophisticated system than was originally planned. The cluster will now have 200 compute nodes and over 5,000 processor cores. Compute nodes range from 24 processor cores with 64GB of memory to 48 cores with 256GB of memory.
- The system is on order, with installation planned for the middle of the current semester.
- As part of the preparation for this and other initiatives, IT is engaged in a major construction
 project in the UD Computing Center. A new 2-megawatt power generator has arrived to replace
 the current 800-kilowatt generator.

You can view full details including the current deployment timetable on IT's Research Computing Web site.

For more information, read this *UDaily* article or contact Dick Sacher, IT Client Support & Services (IT-CS&S) at (302) 831-1466 or dsacher@udel.edu.

Financial Reporting Enhancements

When responsibility-based budgeting (RBB) came to the UD campus, IT began working with many different University offices (e.g., Finance, General Accounting, Research, and Budget) to make it easier for colleges, centers, departments, and units to track funding, income, and expenditures. We've been working to create new systems and modify existing ones to allow individuals with budget responsibilities to see more accurate projections of available funds and to plan for the future. This summer, we have been working on many enhancements to make it easier for you to track this kind of information.

UDataGlance, UD's financial reporting system, now includes the Financial Position Report, giving budget administrators new ways to see the transaction details on Web Forms and other documents listed in the report. Clients can now "drill through" to detailed transaction information by clicking a link in the new report. When releasing the Financial Position Report in June, the Budget Office announced that the new report can be used "to provide a snapshot of your unit's position in real time" as well as being used "as a basis for quarterly revenue and expenditure projections."

We are currently responding to other report requests from the UD community. Some examples:

- We've recently enhanced the process of tracking and displaying detailed budget information about graduate student contracts.
- The new Payment Activity System (formerly PO View) will allow budget administrators to see the
 details of individual purchase orders processed by the Procurement Office.
- We're working to allow clients to see the details of individual Request for Service Web Forms from within UDataGlance reports.
- We've completed the background work to allow budget administrators to see more details on individual credit card transactions from within UDataGlance.
- We're working on the Financial Position tab to allow budget administrators to see more detailed information about transactions in a budget's monthly obligation history.
- We've been working with the Research Office on two new Research tabs in UDataGlance –
 Proposals and Awards. The team has also been working on improvements to billing and
 collections processing within the Research system. Look for announcements from the Research
 Office on these new features this fall.

Many of the enhancements we have made or are currently implementing have come from your input. Campus clients may use the feedback form available within UDataGlance to make suggestions for other improvements to the system, to report problems, or to ask questions about UDataGlance.

Planned Outages

- UDSIS will be unavailable on Saturday, September 17 for a round of patches and fixes that affect financial aid processing.
- UDSIS will also be unavailable Thursday, October 13 (evening) through Sunday, October 16
 when the PeopleSoft system will be upgraded from version 8.9 to 9.0. Exact times for this outage
 will be announced in early October.

Infrastructure

Generator upgrade highlights improvements to UD Computing Center

August 21 marked the arrival of a key piece of the ongoing Computing Center power upgrade: a new 2-megawatt generator to replace our current 800-kilowatt generator.

At over 20 years old, the old generator required expensive repairs to maintain and limited IT's ability to reliably meet the University's growing IT needs. With two and a half times the generating capacity and three times the run time at current loads, the new generator significantly upgrades IT's capacity to offer reliable, uninterrupted service well into the future.

In addition, work continues to double the effective cooling capacity of the Computing Center's air conditioning system and to improve backup power with a redundantly configured Uninterruptable Power Supply (UPS) system. These environmental improvements will be completed by mid-October, providing the critical infrastructure necessary to meet the demand for long-term campus-wide IT growth: the new research cluster (discussed in this report's lead article); the new sustainable, centralized virtualization service; and other business, research, and teaching initiatives.

Wireless in residence halls

Students arriving for the fall 2011 semester found they had wireless Internet access from all residence hall rooms and common areas. Students can now connect their computers, tablets, smartphones, iPods, or any other device with wireless Internet capability to UD's wireless network. This initiative was part of an overall upgrade to UD's wireless network; we currently have over 1,800 wireless access points on the Newark campus. During the first week of the semester, we saw a peak load of over 9,200 devices connected simultaneously to our wireless network.

Research Support

SAS Institute's JMP Pro 9 software and training available at no charge to UD community

You can now download the statistical package JMP Pro 9 for Windows and Macs from UDeploy. Built on the analytical components of SAS, JMP is an excellent analytical tool for interactive data visualization, exploratory data analysis, design of experiments, and robust predictive modeling. It allows you to do exact tests for small-sample-size analyses, perform bootstrapping analyses, and develop electronic notebooks that document your analysis steps.

You can get started quickly by taking the 8-module, introductory JMP Software: Data Exploration course available online. Normally, SAS charges \$250/person to take this course, but it is included as part of our unlimited-use JMP site license. Additional free training materials are available online:

- On-demand webcasts
- The JMP Learning Library

Watch for further announcements at the IT Research Computing Web site.

If you have questions, send email to researchcomputing@udel.edu.

New software licensing procedure for researchers and faculty

In addition to making software available to the University community from the UDeploy server, IT helps coordinate a variety of software licenses for academic departments, individual researchers, and teaching faculty. We just released a new Web Form to streamline processing of requests for these licenses. Using the new "Request for Service - IT Software Licenses" form, you can order software licenses in one step. Currently, requests to renew SAS and SPSS licenses can be processed using the new form. Other software will be added to the form over the fall semester.

Teaching and Learning

New active learning pilot classrooms on campus

Imagine a classroom without a "front of the room" that predetermines how you teach. Imagine a setting where students participate fully in their work groups, and those groups collaborate easily with each other. But, most importantly, imagine all your students engaged in active learning.

A UD initiative is underway to explore new classroom technologies that faculty can use to engage their students and make better use of class time. A new classroom, located in 218 Gore Hall (32 students) includes multiple displays, writing surfaces on all walls, moveable furniture, and a variety of computing and presentation equipment. In addition, a cart with 18 iPads can be scheduled for use in any room in Gore Hall. IT and the University Registrar's office are collaborating on this pilot project.

The goal is to create a dynamic classroom environment in which every student is fully engaged and class time is intellectually invigorating. What we learn from the techniques and technologies used during the pilot period will greatly influence the design of future classroom spaces at UD.

Faculty can participate in the pilot program by contacting the person in their academic department who is responsible for scheduling courses. Make your spring semester request by September 16 for either Gore 218 (group-focused, active-learning classroom) or any classroom in Gore (asking that the iPad cart be brought to your class meeting).

For more information, read this *UDaily* article or complete our classroom technology interest survey to be added to a mailing list about the new classrooms. You can also view more information at the IT-ATS Web site.

Constituent Groups and Feedback

Changes in IT social media

Over the summer, IT has been participating in the Office of Communication and Marketing (OCM) effort to help UD departments use social media more effectively. One of OCM's goals is to help departments reach as wide an audience as possible, improving interactions with students, staff, faculty, alumni, and other audiences.

In a recent OCM survey, the majority of UD respondents indicated they prefer to follow fewer feeds with more information rather than following many specialized feeds. We have adopted this model, combining all IT's Facebook pages into one page (http://www.facebook.com/ITatUD) and combining all our twitter feeds into one (@ITatUD or http://twitter.com/ITatUD). We continue to use our twitter feed to post updates and news on the IT home page (http://www.it.udel.edu).

Business Systems

UDSIS updates

We began the next phase of testing the UDSIS upgrade from 8.9 to 9.0 in July. We expect to complete the testing by September 15, allowing for the upgrade to the production system October 13—16. UDSIS will be unavailable at that time.

HR system updates

The new Labor Allocation Module (LAM) was put into the production Financial system in April.
 The old LAM is no longer in use, except for viewing historical data prior to 04/14/2011. In the new design, LAM database tables reside in the HR system. LAM users will still sign on to Financials to

- enter data, as they did before, using a new PeopleSoft page developed by IT Management Information Services (IT-MIS). This page acts as an interface between Financials and the HR system, sending data entered on the page over to HR and refreshing data any time users make changes to existing data or add a new row of data.
- On July 5, MIS and HR/Recruitment implemented Candidate Gateway and Resume Mirror.
 Candidate Gateway allows external candidates to apply for UD job openings online through the
 UD Careers Web site. Resume Mirror enhances this process by parsing the resumes and
 automatically updating PeopleSoft with candidates' information. As part of this project, the
 recruitment Web Forms were also redesigned to work seamlessly with this process. For more
 information, please contact the Recruitment Office.
- The employee merit system needed enhancements due to the introduction of commitment
 accounting and transfer of the labor allocation module (LAM) to PeopleSoft HR as part of the
 PeopleSoft HR application upgrade to version 9.1. The system uses a new table-based system to
 make reporting more efficient and was completed in June 2011, allowing for successful
 processing of merit raises in July and September.

Academic system improvements

- Emergency and missing persons: Each year, before students may access UD's secure services they must update their emergency contact information. In August, UD benefited greatly from this student self-service application since several emergency messages were sent during Hurricane Irene. Also this year, UD was required to collect a "Missing Persons" contact to be in compliance with the new Missing Student Notification Policy and Procedures (Section 488 of the Higher Education Opportunity Act of 2008). Each student must provide the name and contact number of at least one individual whom UD will notify within 24 hours of the determination that the student is missing. For more information on the policy, see this Public Safety Web page.
- Advising Notes & Degree Checkout for A&S advisors: Beginning this summer, A&S advisors
 will use an online student degree-checkout system to process and notify students of the status of
 the completion of their degrees. This process is complicated and detailed, but moving it online
 keeps advisors and students literally all on the same page. Once this multi-step and multi-system
 process is refined, we will follow up on moving other college degree checkouts online. The
 Registrar's Office will keep the colleges up-to-date on the refinement and extension of this
 process to all colleges.
- Mobile registration and drop/add for students: In addition to the student schedule that has
 been mobile-accessible for a year, UD has added mobile registration and drop/add. IT
 participated in several Leadership classes where students requested this service, and we have
 responded. To use mobile services, students should go to m.udel.edu using their mobile devices.
 You may also preview the site from your desktop or laptop computer.
- Mobile final grades view: Students may now view their final grades from their mobile device.
 This is the same grades view that is also offered in UDSIS but is formatted specifically for mobile devices. Read about all our mobile services in this UDaily article.
- CAS single sign-in to UDSIS self-service and UD applications: IT Web Development (IT-WD)
 has re-worked UD's authentication services so that students and faculty can enjoy "single sign-in"
 between UDSIS and other UD services. To protect your personal information, be sure to log out
 and close your Web browser when you finish using services that require authentication.

Financial Systems improvements

UD implemented CashNet's SmartPay to enable students and parents to pay their semester bills using credit cards. Parents asked for this service, and Finance and IT implemented the service this summer in time for fall bills. For questions on payment methods, please contact Sondra Holbrook-Wagner, Cashier. See more information on UD's CashNet implementation in the previous IT Activity Report.

Student Life system improvements

- Mobile view of housing assignments: When housing assignments were released this summer, incoming students could immediately see their room assignments and roommate on their mobile device or computer. While this view has been online for years, it is now mobile ready.
- Mobile housing check-in: Last summer incoming and returning students could check in online
 using their computers to let Residence Life and Housing staff members know what date they
 were coming to campus. This summer, students used their mobile device or computer to check
 in. If they forgot to check in beforehand, they could check in while they waited in line to move in.
- Academic Honesty Form: Faculty will be invited to use this new online form to report academic
 honesty incidents to the Office of Student Conduct. Faculty should continue to contact the Office
 of Student Conduct at 831-2117 or student-conduct@udel.edu prior to completing the form.
- Student Conduct Referral Form: Faculty and staff may use this new form to report
 miscellaneous incidents involving Code of Conduct violations to the Office of Student Conduct.
 For more information, contact the Office of Student Conduct at 831-2117 or studentconduct@udel.edu.
- Residence Life's package delivery notification system: Students who receive USPS
 packages in the residence halls will be notified via email generated from UD's new online
 package tracking system. This system moves the notification process online and ensures that
 packages are accounted for, picked up, and are able to be tracked. Online searches are available
 to authorized Residence Hall staff members.
- Parent & Family Weekend Registration Form: Parents and students are able to register for Parent & Family Weekend activities using the "storefront" functionality of our new payment processor, CashNet. This form provides customers with a shopping cart model to register for events, and it allows Student Life staff to manage ticket inventory levels. IT-WD worked with the Office of Student Life and the box office to provide comprehensive reports from the system including tallies, rosters, and mailing labels.

Event Production and Media Services

Bob Carpenter Center improvements

This summer, University Media Services (IT-UMS) rewired the Bob Carpenter Center and Delaware Stadium with hybrid fiber cable. The new cables can carry power, HD video, return video, and communication traffic simultaneously. Because the new cables are permanent, University staff no longer need to install and remove cables for each individual event. Further, the new hybrid fiber cable will make it easier to run multiple cameras in different areas of both facilities, giving more flexibility for coverage of athletic contests, commencement, and other major events.

New, more efficient lighting installed in Mitchell Hall

IT-UMS also replaced the lighting system in the Mitchell Hall Theater this summer. The new system, replacing lights installed in 1992, is more energy efficient and more flexible, allowing new possibilities for theatrical applications while costing less to operate.

Training Opportunities

Summer was busy with many requests for customized training in addition to over 50 sessions offered on the LearnIT@UD calendar. One example of customized training was a collaboration between IT and the Registrar's Office to offer the session, "Using Excel with Registrar's Standard Reports." Staff from the Registrar's Office and IT-CS&S conducted several sessions this summer (more are planned for the fall semester). During this session participants learned how to access the Registrar's UDSIS student reports then analyze the downloaded data using Excel. Participants were able to immediately make the

connection between what they're trying to accomplish and the most efficient way of doing so using features such as Pivot tables in Excel.

Requests for training sessions on using a Macintosh have increased. To meet this growing demand, we are offering a variety of Macintosh-based sessions:

- Navigating your Mac
- iPad FAQ and Roundtable Discussion
- Mac Office 2011 Roundtable Discussion
- Excel 2011 for Mac: Formulas and Functions
- Excel 2011 for Mac: Tips Part 1
- Excel 2011 for Mac: Tips Part 2
- Excel 2011 for Mac: Vacation & Sick Leave Worksheet Workshop
- Excel 2011 for Mac: Creating Pivot Tables

To request customized LearnIT@UD sessions, please contact the IT Support Center or go to the LearnIT@UD Web site to browse through the live sessions we offer or view our many recorded sessions.

IT Support Center

IT supports students as they move in

As students moved into their residence halls, the IT Support Center (ITSC) and other full-time and part-time (student) staff from IT-CS&S and IT Network & System Services (IT-NSS) were very busy helping students with technology issues. We had staff headquarters in four residence hall complexes Tuesday, August 30 and Wednesday, August 31, and extended the hours at the ITSC until 8 p.m. on Tuesday.

Most frequent requests for help included the following:

- Help configuring printers with wireless capability (Wireless printing is not supported in residence halls.),
- Configuring smartphones for email.
- · Connecting to wireless, and
- A variety of cable TV questions.

After Hurricane Irene disrupted student arrival schedules, the ITSC saw extensive telephone, text, and email traffic Tuesday–Friday of that week: We handled 1,384 requests for help in those four days, peaking at over 400 requests to the ITSC on Thursday.

ITSC tools streamline service

We have implemented a variety of new tools at the ITSC to streamline our service and to make it easier for students, faculty, and staff to report an issue or request help.

- The Numara FootPrints software continues to improve the way we process your requests. Processing is more efficient, and clients report being pleased with the automatic notifications from the system and the ability to check on an individual incident report.
- When you call (302) 831-6000 and leave us a phone message, Google Voice now transcribes your message and automatically submits it to the FootPrints tracking system.
- During 1743 Welcome Days, we experimented with live text-message conversations; nearly 100 students used that method to contact us.
- We've acquired a license for TeamViewer, software that allows a client to share his or her computer screen with ITSC or CS&S staff, allowing for more efficient troubleshooting and problem solving.

You can contact the ITSC via our Help Request Form, telephone ([302] 831-6000), or email (consult@udel.edu).

Personnel

Laura Deschere accepted a Web Developer position in IT-WD. She was employed previously as a Web Developer in IT-MIS and for the past year has been working in a miscellaneous wage capacity in IT-WD. Laura has over 10 years experience in Web development and will take a lead role in developing and supporting Web-based information services used by the University's core business processes.

Brion Reilly became a member of the IT-UMS unit in July as a Classroom Technology Technician I. Brion has extensive experience with audio/visual technologies in retail and as a freelance technician/consultant. His primary focus will be providing technology support of campus classrooms.

Juley Dricken joined IT-UMS in July as a Classroom Technology Technician I. She has many years of experience with audio/visual technologies in the commercial side of the computing industry. She comes to IT-UMS from UD's Professional & Continuing Studies unit where she worked providing classroom technology support in the UD Downtown Center. Juley will help the Classroom Technology group provide support for campus classrooms.

The IT Activity Report is published 4-6 times a year. Archived reports are located at http://www.udel.edu/it/activity-reports.html. If you have comments, questions, or suggestions for future articles, contact the IT Communication Group at it-commgroup@udel.edu.