

Information Technologies Activity Report

FEBRUARY-MARCH 2011

We Heard You

In November, we asked you to tell us how we're doing in our annual customer satisfaction survey. In general, respondents expressed positive attitudes toward IT staff and the services that IT provides. But we were also pleased that so many of you took the time to make suggestions for improving our services.

Fix PeopleSoft! During Registration periods the system is overloaded, and for practical purposes we can get no useful work done.

We are in the middle of a major upgrade to the PeopleSoft software and hardware that support Human Resources, UDSIS, and Financial Systems.

First, we have purchased new hardware that will improve the performance of all three systems. We are currently testing the new hardware; it is scheduled to become the production environment in October. In initial testing, the new environment has proven to be much faster. The new system will also have a load balancer to optimize the allocation of computing resources.

Second, we are upgrading the PeopleSoft software that supports all three systems. The new versions of the software will improve system performance. Human Resources applications will be upgraded beginning on April 13; UDSIS will go into production in October; we will start the Financial Systems upgrade in September.

These changes should make all of the systems more responsive.

UD's wireless networks are "sketchy" to say the least and appear to be deteriorating. There are quite a few dead zones in buildings where you can't get a wireless signal, including offices and meeting rooms.

We are in the middle of a major upgrade to our campus wireless network. During the fall and winter, we started to install more wireless access points (WAPs) and swapped out older ones for faster and more reliable ones. So far, we have replaced older WAPs and have installed new ones in 43 academic and administrative buildings in Newark, including both Student Centers and the Morris Library; in five buildings on the Lewes campus; in the George Read, Russell, Harrington, and Dickinson residence complexes; and in the James Smith, Thomas McKean, Independence, Lane, and Thompson residence halls. We have now replaced older WAPs with newer, faster ones in about two thirds of UD's academic and administrative spaces. Contact the IT Support Center to report problems or to suggest other areas where it would be useful to have wireless service.

The Help Line and the trouble ticket system sometimes take a while to respond and sometimes do not provide follow through that an issue has been resolved.

We continue to work to improve client response time whenever you contact us to report an issue or seek help. To that end, we have begun using new software at the IT Support Center to help you report incidents and track our progress on your incident reports. The software also helps us track our responses to clients. Over the next year, we will roll out more self-service features as well as access to a growing public knowledge base of tips and solutions.

Projector systems in many classrooms are antiquated.

At the time of the survey, we were 2 years into a program to update projection equipment in all centrally scheduled classrooms. About 40% of the projectors were over 4 years old, including 16% over 5 years old. We purchased 68 new projectors and, over spring break, installed them in the classrooms with the oldest projectors. Now 65% of our classroom projectors are less than 2 years old. Next year, we will continue to replace projection equipment so that no classroom has out-of-date projectors.

The area around the IT systems in the classrooms is very dirty and rarely cleaned.

We can't be certain which classrooms faculty were concerned about when they made comments like this one. However, we do know that classrooms with heavy chalkboard use sometimes are dustier than others. Custodial staff clean the chalkboards regularly but fear damaging electronic equipment and do not clean around it. We have, therefore, hired and trained additional student staff to check, maintain, and—if necessary—clean our equipment.

If you have any other feedback on our services, don't wait for the next annual survey. We can only address those issues we know about. So use the feedback form or Help Request Form linked from the IT Support Center Web site to let us know if there is something we can do to help you or your department.

Data Center Consolidation: How Virtualization Can Help UD

In our last Activity Report, we reported that one of our goals is to promote the use of virtual servers to reduce campus electrical consumption, provide more efficient use of computing hardware, and reduce client departments' time administering physical systems. Virtualization refers to running multiple systems on one physical computer. How can virtualization benefit the University?

- Virtualization is a green technology. Running multiple systems on one physical server reduces
 the overall consumption of electricity, both from running fewer computers and by reducing the
 need for electrical infrastructure and cooling.
- Virtualization saves money. Not only will the University's electric bill decrease, but fewer computers need to be purchased.
- Virtualization saves space. Using fewer physical computers means using less physical space. As our central virtualization service grows, departments can free up space currently occupied by physical servers.
- Virtualization is an efficient way to use computing resources. Typically, a server uses about 10-15% of its resources during regular operation. Running multiple virtual systems on one physical system can use 80-85% of the physical server's resources.
- Virtualization makes it easy to plan, implement, migrate, and test new technology without disruption to current services.
- Virtualized services save staff resources. Deploying new systems is faster, and because there
 are fewer physical computers to support, system administration is less time-consuming. Your
 department's computing staff can focus on the actual services or software you are using and
 spend less time on hardware or operating system maintenance.

We are actively discussing the parameters for our virtualization service with departmental IT professionals across campus. Our current pilot service hosts about 25 virtual systems for five departments—all housed on three physical systems.

UDelNet Now Supports Stronger Passwords

We have implemented a new UDelNet password system to improve the security of all University systems.

Although you do not need to change your current UDelNet password if it does not conform to our new standards, we recommend that you change your old 6-8 character password to a more secure password. A strong UDelNet password is essential to secure the academic, financial, medical, or other UD information entrusted to you.

All **new** UDelNet passwords must conform to the following rules:

- Passwords must contain 8-30 characters—longer passwords are generally more secure.
- 8- to 9-character passwords must pass a dictionary check. For example, your password needs to be more secure than a name, a word, or a word with a number tacked on.

- 10- to 30-character passwords are tested using the following point scoring system. Three points are required for approval:
 - 1. One point for using an upper case letter.
 - 2. One point for using a lower case letter.
 - 3. One point for using a number.
 - 4. One point for using any character not listed above with the exception of a blank "space."

You can preview the security of a potential password using UD's password checker.

Remember to keep your password secret—don't write it down and don't tell it to anyone!

Planned Outages

HRMS 9.1 outage during upgrade

HR and IT Management Information Services (IT-MIS) have scheduled the new PeopleSoft HRMS 9.1 upgrade on Wednesday, April 13, starting at 5 p.m. The upgrade is expected to last through Monday morning, April 18 at 8 a.m. New features will include Commitment Accounting, Candidate Gateway, and Resume Mirror. HR will schedule the roll out and training for the new features.

After the upgrade, HR will notify the University community when HRMS is available for use. HRRPT will be available for reporting throughout the upgrade.

Security, Privacy, and Safety

Responsible computing for contractors

Staff and students should already be aware of UD's Responsible Computing policies. A new Responsible Computing policy has been created for Contractors. All contractors who have access to UD computing resources must be aware of this policy. The Information Security Office (ISO) is available to give presentations and answer questions to groups of contractors. The ISO can be reached at (302) 831-3376.

Google Apps @UDel.edu security guidelines

The ISO has released security guidelines for the appropriate use of Google Apps @UDel.edu. Please review these guidelines as they relate to privacy, research, and various types of sensitive information. If you have questions, contact your departmental IT administrator or the ISO at (302) 831-3376.

Infrastructure

Campus networking infrastructure upgrades

Campus network capacity continues to increase, and upgrades are underway in several areas:

- The campus wireless network is being upgraded with faster wireless access points (WAPs). In addition, more WAPs have been installed in residence halls as we move towards our goal to provide ubiquitous wireless coverage in the residence halls. We've upgraded wireless equipment in 43 other buildings in Newark—including the Perkins and Trabant Student Centers, the Morris Library, over 24 academic buildings, and several administrative buildings as well as five buildings in Lewes. (See complete list of buildings with wireless upgrades.) This project is a priority and will continue through the end of 2011.
- The fiber optic ring to Philadelphia, which currently operates at 10 gigabits/second, will be upgraded to an initial capability of 40-50 gigabits/second. In the future, it will be easy and inexpensive to upgrade to hundreds of gigabits/second.

• The network "core," which until recently was entirely contained in the UD Computing Center, is being extended to include multiple locations around the Newark Campus to improve robustness and reliability. A second node of the core is now located in Hullihen Hall. Additional core nodes will be implemented in the future. Ultimately, all Internet and Internet 2 connections will be accessible from multiple nodes and no longer be dependent on a single building.

Research Support

New Research Computing Web site

IT has developed a new Research Computing site to support researchers at the University. The site offers news for UD researchers, resources to aid in the use of information technologies in research, and a collaboration page that describes the support IT can give you to further your research goals.

The new site was announced in a UDaily article in February.

Recent news articles on the site describe InCommon, a federation of universities and other organizations that makes it possible for researchers to use their UD passwords to access the facilities and resources of other institutions; upgrades to the campus networking infrastructure; and UD's participation in the TeraGrid, a collection of powerful supercomputers.

Videoconferences on federal grant-funding opportunities

As part of its research-support efforts, IT is holding federal grant-funding workshops as interactive videoconferences this semester. Registration is required, and the workshops are open to UD and DSU faculty, staff, and students. Seating is limited.

- April 13 (10-11:30 a.m.): Dr. Mary Alice Ball, Senior Program Officer at the Institute of Museum and Library Services, presents an interactive session entitled "The Institute of Museum and Library Services: Grants and Programs."
- April 27 (2-3 p.m.): The National Library of Medicine (NLM/NIH): Biomedical Informatics Grant Programs. Dr. Valerie Florance, Associate Director for Extramural Programs, National Library of Medicine, will discuss the basic types of grants and program priorities for grants offered by the NLM.

See the Research Computing News page for more information and links to registration.

Mathematica 8.0.1 and Origin 8.5 now available on UDeploy

UD faculty, staff, and students may now download Mathematica 8.0.1 and Origin 8.5 from the UDeploy software distribution site by selecting Scientific and Research Software for their operating system.

Mathematica is available for Windows, Mac, and Linux systems. Origin, a comprehensive statistical and scientific graphics program, is only available for Windows.

Both packages are site-licensed by IT for University-related activities. IT does not charge the UD community for use of the software on departmental and personally owned systems.

See the Research Computing News page for more information about the features of each software package.

Teaching and Learning

2011 Summer Faculty Institute offers "Passport to Success"

Join faculty from across campus at this year's Summer Faculty Institute. Our 2011 theme is "passport to success." The sessions will introduce faculty to recent instructional research and the latest technological capabilities, beginning with a keynote presentation by Dr. Susan Smith Nash on May 31. Dr. Nash is the

co-author of Excellence In College Teaching And Learning: Classroom And Online Instruction (with George Henderson; Charles C. Thomas; Springfield, IL; 2007) and blogs regularly on educational issues (www.beyondutopia.net and elearningqueen.com).

Sessions will be offered Tuesday, May 31 through Friday, June 3. The week will take the shape of a course: faculty will be "students" for the week, participating in sessions led by other faculty members and IT staff. Encouraged to think like students, participants will be introduced to every aspect of a course while also acquiring the technical and pedagogical skills to use these teaching tools themselves.

Registration for and more information about the Institute will be available at the IT Academic Technology Services (IT-ATS) Web site later this month.

UD Faculty Roundtable series "Speaking of Teaching" special presentation

Dr. Robert Gonyea, Associate Director for the Center for Postsecondary Research at Indiana University, will present "Getting More without Assigning More: How Good Writing Practices Relate to Student Engagement and Learning" at an April session of the spring UD Faculty Roundtable series.

Gonyea's presentation will advance the provost's stated goal that the University establish "a more rigorous writing program for students in all disciplines and across the curriculum." (Review Provost Apple's remarks in this UDaily article.)

Gonyea is associate director of the Indiana University Center for Postsecondary Research. He coordinates research and reporting for the National Survey of Student Engagement (NSSE) and associated projects and is also director of the College Student Experiences Questionnaire.

Gonyea's presentation will take place in Puglisi Hall at the Roselle Center for the Arts on Thursday, April 21, 10-11:30 a.m. Refreshments will be served. If you plan to attend, please register by sending email to provost-office@udel.edu.

Business Systems

Grad Contract interface to UD Financials

Last month, the Grad Contract journal interface to UD Financials went into production. With this interface, we can harvest information about grants and scholarships that come to graduate students under contract, merge that data with graduate student contract forms that have been processed, and allocate the costs to appropriate departments and colleges. After testing the interface this winter using fall semester data, we ran make-up production runs on the fall semester data, then the winter semester data, and finally the spring semester data in early March. We began harvesting changes on a daily basis in late March. A committee from the Graduate Studies Office, Budget Office, Institutional Research, and IT worked to refine the specifications and develop a methodical approach. The committee believes the project will be an ongoing benefit to the colleges because they will have immediate access to current cost information.

Increased use of virtual machines

IT Management Information Services (IT-MIS) is working with IT Network and Systems Services (IT-NSS) to implement several PeopleSoft process schedulers in a virtual machine environment. The software is working well in its virtual environment, and it has had the added benefit of reducing the electrical resources used for this part of UD's PeopleSoft systems. Because of the benefits spelled out earlier in this activity report, we will continue to look for other appropriate opportunities to use virtual systems.

Training Opportunities

New Roundtable Discussions

In response to feedback from the campus community that people would like to see how others use technology, we now offer a new type of training session called "Roundtable Discussions." IT staff facilitate each discussion starting with a few examples shared during previous LearnIT@UD sessions on a related topic. For example, staff will show how you can easily create a survey using Google Forms. Each session offers the opportunity to ask questions about specific problems. Our current Roundtable offerings include the following:

• Google Apps Roundtable

After IT staff share best practices from around campus, participants then discuss how using Google Apps has benefitted their departments. Google Apps experts are on hand to offer suggestions, but mainly, participants learn from each other how to make the best use of Google Apps.

iPad FAQ and Roundtable

These sessions benefit both new and seasoned iPad users. They begin with a brief overview of iOS, the iPad's operating system, and some iPad tips and tricks, including a demo of how to use iTunes to manage files (presentations, music, video, books, and documents). Participants can bring both questions and solutions for the discussion of typing shortcuts, "good vs. popular" apps, displaying your iPad screen via a projector, and other issues.

Excel Roundtable

After IT staff demonstrate some popular ways Excel is being used, participants share their interesting ways of using Excel that might be helpful to others.

Client feedback

We're always looking for suggestions on ways to improve our services to the campus. In addition to an online survey sent to all instructor-led session participants, we've been calling participants to chat about their IT training and education experiences. Based on feedback, we've made changes to some of our offerings.

- Many participants told us that some of our sessions aren't long enough. Therefore, we've extended the length of several sessions.
- Several participants commented on the value of a particular session (e.g., PC Desktop Best Practices and Excel: Tips and Tricks), prompting us to offer the same session for their departments.
- During one of our Excel Roundtable sessions, we discussed tracking vacation and sick leave.
 After the session, several participants shared how they use Excel to track leave. Using the examples shared with us, we now offer a separate hands-on workshop on using Excel to track vacation and sick leave.
- Our iPad FAQ and Roundtable Discussion created lots of feedback that has resulted in our planning individual sessions that focus on iPad apps and its operating system (iOS).

Your feedback is valuable, so please feel free to contact us with any suggestions, questions, or training requests.

IT Support Center

On March 14, we started to track incidents using our new system, Numara FootPrints. We are using it to track 70-80% of all incidents that go through the IT Support Center. The rest continue to be tracked in Remedy, but we will bring them into FootPrints as soon as possible.

We've been tweaking the system since it went live—ironing out some kinks in workflow and email notifications, for example. We are studying existing workflows and are planning to automate processes like system access problems and copyright violation notifications.

Our next step is to phase out Remedy completely. At the same time, work is being done to move online help topics into the FootPrints knowledge base. By the end of June, we will roll out a self-service portal for clients that will allow them to submit help requests, check on the status of their incidents, and find answers to questions in the public knowledge base.

With the rollout of FootPrints, we have officially changed the name of the IT Help Center to the IT Support Center.

Personnel

Charles Marsh joined IT University Media Services (IT-UMS) as a Video Producer. He was employed previously by IT-UMS 10 years ago; for the past 3 years he has worked for the department part-time. Charles has extensive experience in video production and will work on developing and producing videos for UD projects.

Christopher Petrilla joined IT Web Development (IT-WD) as a Web Developer I. Chris recently graduated from UD and was first employed in the IT-WD Communication Group as its technical writing intern. He continued as a part-time employee for both the Web Resource and IT Communication groups. Chris brings to IT his many technical skills in Web design and Web languages.

Matthew Szymanski accepted the Network Engineer III position in IT-NSS. He comes to UD with extensive experience in the telecommunications industry and is a BICSI Certified Registered Communications Distribution Designer. Matthew will plan, design, integrate, and implement telecommunications cabling and networks in the areas of campus voice, video, and data.

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.