Voice over Internet Protocol update

The new cutover date for the Voice over Internet Protocol (VoIP) telephone conversion is the end of September. (See this *UDaily* article for more details.)

Over the summer, faculty and staff received new VoIP phones in preparation for the transition. This advanced voice service, with equipment by Cisco, is being installed by UD Telephone Services in partnership with Dimension Data.

Dan Grim, IT's Chief Technology Officer, explained that the first priority for the transition is to maintain, as closely as possible, the services individuals had with the old system.

After the conversion, we will begin to offer new VoIP services such as Web access to voice mail, the ability to send voice mail to your email account, and the ability to link your office phone to a cell phone.

The new system will offer nearly all the same features as the current Centrex phone service (e.g., on campus four-digit dialing) with added benefits such as caller ID and message waiting, free domestic long-distance calling (including Alaska and Hawaii), and improved sound quality.

UD phone numbers will remain the same. More importantly, the cost of telephone service will not increase.

VoIP carries voice conversations as data packets, which are transmitted over the University network rather than a separate phone network. This setup eliminates the need to monitor and repair the existing, separate telephone infrastructure.

Faculty and staff should continue to make and receive calls on their existing telephone, but may also place calls using their new telephone. All inbound calls will continue to be routed to the "old" equipment until the cutover at the end of September.

UD's VoIP Web site will be updated as the project progresses, providing information on phone features, training resources, and FAQs.

Interdisciplinary Science and Engineering Laboratory (ISE Lab)

IT University Media Services' (IT-UMS) Classroom Technology unit played a major role in the new ISE Lab.

Working with the architect, the contractor's A/V consultant, and the College of Arts and Sciences, IT-UMS designed the A/V systems, specified the equipment, and oversaw its installation in the eight centrally scheduled classrooms and four problem-based learning (PBL) classrooms on the academic side of the building.

For the research side of the building, the Classroom Technology unit helped design and oversaw the installation of the A/V for all departmental spaces including video conference rooms, the digital signage system, and the common space.

IT-UMS worked with IT Academic Technology Services (IT-ATS) to incorporate information learned from the technology "testing" room in 218 Gore Hall and combined that information with the latest A/V technology to outfit the classrooms in the ISE Lab with some of the most technically advanced teaching systems of any university.

UD Capture has been installed in the eight centrally scheduled classrooms. The classrooms feature improved audio pickup for the recordings and support higher resolution video inputs.

IT-UMS is also supporting Smartboards in rooms 222, 322, and 417 with installed computers (Mac Mini's).

Since classes began, the Classroom Technology unit has received minimal calls from faculty for support in operating the systems, which were designed to be user friendly.

IT Tech Fair scheduled

IT invites faculty and staff to come and explore the ways technology can help them, their clients, and their students.

This year's Tech Fair is being held on October 30, from 10:30 a.m.–2:30 p.m. in the Trabant University Center (TUC) Multipurpose Rooms. Lunch will be provided.

The Tech Fair is a unique opportunity for faculty and staff to familiarize themselves with the technology services offered by UD. University staff members who provide technology support and manage central systems will be available for questions, short discussions, and hands-on experience with technology tools.

This year's event includes more representation from campus units that provide support for various technologies, including

- Human Resources;
- Procurement;
- Office of Communications & Marketing;
- Registrar's Office;
- Institutional Research; and
- Student Multimedia Design Center.

For more information, visit the 2013 Tech Fair Web site. You can register online.

Infrastructure

Win domain file services (WinDFS)

In June, IT rolled out Win Domain File Services (WinDFS) to the University community—a subscription-based, native Windows storage solution offered for University departments to locally manage University information. Authentication and management are based on WIN Active Directory, so anyone with an active UDelNet ID can be given access, on- or off-campus, and permissions can be managed by unit IT professionals directly using Win Domain Organizational Units.

Units may sign up for shares ranging from 50 to 2,000GB at a monthly cost of $0.06 per GB. Units may request multiple shares and resize allocations as needed. Features include 90 days of nightly rolling backups, volume shadow services, and an off-site active data replication configuration. To date, approximately 11TB have been allocated to 11 units across campus.

Additional information can be found at the Win Domain File Services Web site.

Research Support

Will UD get a second community cluster?

The level of interest and funding available from the UD research community will determine if UD gets a second community cluster. Many faculty members were away during the summer months, so IT has

agreed to extend the discovery process through the month of September, with a possible deployment of the next cluster in February 2014.

The final design decisions, compute-node costs, and deployment will depend on the UD research community's commitment to the number of nodes. To make sure your input is included in the design and cost-sharing plans, contact Dan Grim (grim@udel.edu) to schedule a meeting with IT to discuss your high performance computing needs and your level of interest in the next community cluster.

Mills (UD's first community cluster) represented a partnership between 50 faculty investors and IT in funding and operating a general-purpose, high performance computing (HPC) cluster for a broad base of UD researchers. IT paid for the high performance (Lustre) storage; networking switches (InfiniBand); the head node; the physical environment (e.g., space, cooling, and power); system administration; and installation of commonly used software. Faculty and their research groups paid for compute nodes and took responsibility for installing their own specialized commercial and open source software.

New HPC portal

In June, IT announced a new HPC portal Web page, which provides easy access to its high performance computing services, including HPC On-Demand, UD HPC Wiki, and hpc-ask information. (See this *UDaily article* for more details.)

Training

IT participated as an in-person site for the VSCSE Data Intensive Summer School workshop (July 8-10, 2013). The Data Intensive Summer School focused on the skills needed to manage, process, and gain insight from large amounts of data. There were over 450 attendees from all satellite sites. The majority of the 22 participants at the UD in-person site were from the University of Delaware and JP Morgan Chase, with others from Kean University, University of Texas at San Antonio, Rochester Institute of Technology, West Virginia University, New Jersey City University, Richard Stockton College of New Jersey, and the University of Virginia. Two teaching assistants were available and funded by VSCSE to provide help throughout the three-day workshop.

IT also participated as an in-person site for the MPI HPC workshop (September 4-5, 2013) hosted by XSEDE, the Pittsburgh Supercomputing Center, and the Texas Advanced Computing Center. This workshop provided C and Fortran programmers a hands-on introduction to MPI programming. A total of 146 individuals attended from all the satellite locations. The UD in-person site had five participants from the University of Delaware and one from Rutgers University. The workshop was well done and provided participants with a working knowledge of how to write scalable codes using MPI.

GIS news, events, and announcements

If you have been using geospatial software and have not already done so, please use the Request for Service–IT Software Licenses Web Form to renew your geospatial software for fiscal year 2013-14. Licensed geospatial software includes: ArcGIS, ENVI, IDL, and ERDAS IMAGINE.

We have published the September edition of the Geographic Information Systems news. You can find out more about new software and data updates, community news, learning sessions, and other GIS-related opportunities.

Save the date

The University of Delaware along with MAGPI (Metropolitan Area GigaPoP in Philadelphia for Internet2) and Internet2 are excited to host "Network Delaware: Advancing Research and Education Initiatives Across the First State." The event will be held on November 6, 2013, 8 a.m.–1:30 p.m. in Trabant Multipurpose Room C. Lunch will be provided.

Discover the power of advanced networking opportunities in research and education throughout the First State. Although Internet2 originally focused on high-end research, it has created working groups and fostered initiatives that touch every aspect of scientific endeavor including high performance computing,

arts and humanities, healthcare, K20, and libraries. Join us to learn how these resources can enable your research and educational initiatives locally, regionally, and nationally.

Teaching and Learning

Clickers@UD updated

Clickers@UD have been updated for fall 2013. Faculty can:

- Use Sakai@UD integration as the default for easier roster syncing.
- Collect demographic information and compare results through a stacked column display.
- Switch courses without closing the i>clicker program.
- Limit responses to a particular class roster; this feature solves the problem of capturing input from courses in neighboring classrooms.

New receivers (bases) have been installed in all centrally scheduled classrooms. Faculty using i>clickers may request a remote from ats-info@udel.edu. The new model adds features for showing the frequency and a laser pointer. i>clicker2 is the recommended model for students purchasing a clicker for fall. A blend of both student models (original and i>clicker2) can be used in the same class to respond to multiple-choice (A-E) questions.

Profiles: faculty teaching with technology

Looking for inspiration and insights into how technology can improve your teaching and your students' learning? Visit the UD Faculty Profiles section of the IT-ATS Web site. Whether you're teaching in the humanities, engineering, or the sciences, with a large class or a small Study Abroad group, you'll find something that relates to your course. If you are interested in using iPads, a learning management system, UD Capture, clickers, or another teaching technology, chances are we have profiled one or more of your colleagues using that technology.

Since our last Activity Report entry about the profiles, two faculty profiles have been added. The short videos focus on a single topic or technology, so that you can understand the faculty member's perspective quickly. If you'd like to recommend a colleague or yourself for a future profile, please contact the IT Communication Group.

Canvas@UD adoption growing steadily

An increasing number of UD faculty members have adopted Canvas@UD to host their course sites for fall semester 2013. As of September 8, 142 active Canvas@UD sites were in use by UD faculty, doubling the spring 2013 numbers.

Faculty members who have started using Canvas appreciate its sleek user interface, course content authoring and sequencing capabilities, and built-in media support. Early adopter Anuradha Sivaraman, assistant professor of business administration, said she felt very strongly about Canvas' grade book. "You can grade online on Canvas; you don't have to download anything and grade it. I was able to do everything on the Canvas screen itself. Getting and giving feedback was amazingly easy, too. It saved a lot of time for my TAs because they don't have to do the busy work of downloading and uploading," she explained. (See this *UDaily* article for more details.)

Canvas@UD is an alternative to Sakai@UD for instructors seeking a different learning environment for their courses. IT supports both Canvas@UD and Sakai@UD. To find out more about Canvas@UD, visit our Canvas@UD information Web site where you can request a site or a consultation with IT-ATS staff.

Business Systems

UDeposit expands services

Beginning August 2013, General Accounting and IT Web Development (IT-WD) expanded UDeposit services to include revenue allocation for cash deposits. Merchants on campus who independently deposit cash and checks to M&T bank are able to log in to UDeposit to review bank account activity, allocate deposits to a revenue account, and produce reports. For more information regarding this new functionality, contact General Accounting (831-2175 or general-accounting@udel.edu). For more information on UDeposit, see the General Accounting Web page.

UDataGlance improvements

UDataGlance, UD's financial reporting system, has recently been improved with additional information and drill-down capabilities.

- Details for Fuelman and Voyager transactions are available by clicking on the reference number on the transaction.
- Drill through to BILL Web Forms is available by clicking on the reference number of the transaction.
- Work Order number is now available in UDataGlance, making it easier to track Facilities-related transactions. Drill-down to the original Request for Services Facilities Form is also enabled.

IT-WD and General Accounting will continue to develop and refine this system in conjunction with the Budget Office, the Research Office, and Institutional Research, including feedback from campus users of this system. A feedback form is available within the system to submit ideas or to report problems.

Journal Voucher Web Form improvements

General Accounting and IT-WD continue to make improvements to the Journal Voucher, UD's most used Web Form. Recent improvements include the following:

- Both debit and credit boxes are now available on each line of the journal to accommodate changes on a partially completed form. Previously, to change a debit transaction to a credit transaction, you had to delete the incorrect row and add a new row. Including both debit and credit input boxes for each transaction makes such corrections less cumbersome. It is important to note that in a single transaction, a debit or a credit may be entered but not both.
- Employee benefits transactions are now calculated when applicable salary transactions are entered on a journal.
- Originators can now enter free-form comments on a new memo field that has been added to each line of a journal.
- We have implemented an option to ease entry of Accrual/Deferral entries. This functionality is generally used to create an accrual of expense or deferral of revenue, with the subsequent reversing entry created in a future accounting period. Before this change, two separate journal forms for accruals/deferrals were required.

New Change of Catalog Year and Course Substitution Web Forms

In July, IT-WD implemented two new Web Forms with the Office of the Registrar at the request of the Academic Advisement Deans. In their combined efforts to improve advisement and increase retention at UD, the goal was to enable these processes online. The Change of Catalog Year Web Form enables advisors to change the catalog year for a student's program/plans.

The Course Substitution Web Form enables advisors to communicate course substitutions and exceptions for a student. They then submit these changes via a Web Form to the Colleges and Office of the Registrar, and updates are made to the student's degree audit. The completed form also gets linked

to the corresponding student in Advisor Notes to facilitate advising. The Registrar's Office is offering several workshops this fall to train advisors/departments on using the new Web Forms.

New Invoice Payment Approval Routing Web Form

Developed collaboratively by a team that included members from IT-WD; Facilities, Real Estate, and Auxiliary Services; Financial and Management Services; STAR campus; the Research Office; and Procurement Services, a new Invoice Payment Approval Routing Web Form went live this summer. Authorized Facilities, STAR campus, and Research Office personnel use this form to route invoices related to a purchase order for approval and submission to Procurement for payment.

This new form replaces the current email process followed for invoice approval and payment process, increasing the speed with which a form can be routed for the necessary approvals. Automatic population of payment funding sources directly from purchase orders results in more accurate chartfield information and payments. Another benefit of this form is that it is easier for form users to track the status of approvals. The team expects to continue refining this process over the next few months, incorporating feedback from users of the form.

UDTime affects forms and views

Many components of the UD Time system went live in August 2013—several new Web Forms, a few new Web Views, and changes to existing Forms/Views. Several more Web Views are targeted to go live this fall.

IT-WD uses Web Forms and Web Views to maintain a single, simplified, and familiar user interface to functions like requests for leave. The results of completed Web Forms are updates that are sent to PeopleSoft Human Resources and the UDTime systems. The new Web Forms should work well on your desktop computer, tablet, or cell phone, making it easier to submit or approve a form. IT-WD worked with Human Resources Information Technology to deliver the Web Forms and Web Views needed to interface with UDTime and PeopleSoft Human Resources.

International students may pay bills by wire transfer

A new service was introduced in July to enable international students to pay their tuition and fees by wire transfer using their local currencies. From UD's "My Finances" Web application, international students and their parents have a new payment option "International funds transfer," which leads them through a few brief screens to choose their preferred currency and generate documents to take to their banks.

The service is the result of a partnership between CASHNet Higher One® and Western Union Business Solutions. This new service provides seamless processing through the existing "My Finances" Web application and existing student-billing systems. It replaces a manual and cumbersome process of matching payments to student accounts and also allows for faster receipt of payments.

Benefits to the student include no international wire transfer fees and real-time, competitive exchange rates that are locked and guaranteed for 72 hours. IT-WD, the Cashier's Office, and Student Financial Services worked together to enable this implementation.

Oracle database software upgrade project

The IT Management Information Services (IT-MIS) Database Administration (DBA) team has completed the project to upgrade the base Oracle database software to the latest version for the Human Resources PeopleSoft database and application. The production database was successfully upgraded in spring 2013. In addition, the Sakai@UD database was upgraded to the latest software version to keep it current with PeopleSoft and other production databases.

UDTime database

The DBA team completed tasks associated with the implementation of the UDTime application, working with the Human Resources programming staff to ensure a smooth transition. They have also been part of the work associated with the PC-based vendor software and its interaction with the database.

Oracle database software security

The DBA team has been working to complete the implementation of the latest Oracle database software security patches to bring the software up-to-date and tighten security where appropriate. The Web Forms database and the Student and Financial PeopleSoft databases have been patched. The Human Resources database is scheduled for September 2013. All of the test and production databases are scheduled for this software patch and will be completed as soon as possible.

UD Financials

- For several years, IT-MIS has automated the change of Grants Facilities & Administration percentage adjustments for various colleges for the new fiscal year. This summer, IT-MIS completed this task for fiscal year 2014, saving the Research Office thousands of manual entries.
- We have completed some behind-the-scenes programming to deliver "beginning balances" in the balance files that drive UDataGlance, so that although balances are in transition, administrators can see an estimate of beginning balances in July before the final close of the previous fiscal year. This programming is in final review.
- IT-WD and IT-MIS put a journal reversing process into production as well as some changes to ensure the reverse journals reported correctly in UDataGlance.
- We expect PeopleSoft Financial Bundles to be installed in September for testing prior to implementation in October.
- A General Ledger program ("scrub") to account for department changes in our chartfields and to generate adjusting journal entries went live as a pilot late this spring and was in full production for the new fiscal year.
- Additional streamlining of Auxiliary Services Accounting feeds to the General Ledger is in place.

Training Opportunities

LearnIT@UD

During the past few months, we offered over 50 instructor-led sessions and conducted many individualized custom classes. Classes about Excel and Google Apps were among the most popular. To request customized training, send email to consult@udel.edu or visit our LearnIT@UD Web site.

LearnIT webinars: quick, online training

We know how difficult it is to get away from the office to learn about technology. That's why we run 10-15 minute live, interactive webinars every Wednesday at 4:00 p.m. Our LearnIT Express sessions cover a wide range of topics. Some topics are overviews of upcoming classes; some sessions cover IT services such as the UD Dropbox and our PO Box. We recently added a session on how to find the Cognos Registrar report you need.

If you have a topic you think is of interest to the University community, please let us know by sending email to consult@udel.edu. You don't have to be the person presenting the information—we can do that for you. Just let us know what topic you think might be useful for others to know, and we'll work with you to create a webinar.

For our training calendar, recorded sessions, and all LearnIT@UD resources, visit the LearnIT@UD Web site.

IT Support Center

The IT Support Center handled over 200 calls during this year's 1743 Welcome Days weekend. Most of the calls were resolved by IT Support Center staff—without the need for referral to technical staff in the field.

Staff from IT Client Support & Services (IT-CS&S) and IT Network and Systems Services (IT-NSS) were on hand in three residence hall locations: George Read North Commons, Rodney A/B Lounge, and Louis Redding Commons. These staff provided support to students on a variety of technology issues such as connecting computers to the network, setting up printers, configuring phones for email, and hooking up TVs.

Due to improvements to the wireless network and IT's software that senses new devices and prompts for registration, requests for help decreased this year. Students were able to connect to the network with little or no help from IT. Even though 1743 Welcome Days are over, support is still readily available. Student staff members from IT-CS&S continue to field questions and visit residence hall rooms as needed.

Personnel

Lynn Grant joined IT-UMS in July as an Administrative Assistant I. She works in East Hall and provides office support for IT-UMS and IT-ATS. Lynn had been employed in the Communications department at the University for the last 2 years. Prior to working at the University, she worked in the private sector providing office management, customer service, and financial support.

Jean Neff, who is currently responsible for UD's IT Education and Training program, will join the Human Resources department's team as Associate Director of Employee Education and Development effective October 1. In her new role, Jean will be responsible for the assessment, development, and implementation of education and development programs for the University.

Jean's education and work experience in the fields of technology and adult learning principles and practices makes her a welcome addition to HR's current Education and Development team.

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.