

Information Technologies Activity Report

SEPTEMBER-OCTOBER 2011

Exchange 2010 Service Coming in November

IT Network & Systems Services (IT-NSS) has announced that Exchange 2010 will be available to all campus faculty and staff starting November 18. Microsoft Exchange is the server platform used to manage email, calendars, contacts and tasks. Exchange 2010 works with Microsoft Outlook, which is part of the Microsoft Office suite.

The Exchange 2010 service is fully integrated into UD's Windows Active Directory and offers several advantages over the existing Exchange 2007 service, including password synchronization with other UD systems, improved Web access via various browsers, quotas that can match those offered by external mail providers like Google, and a higher level of availability and reliability. IT-CS&S will be presenting an overview of the new Exchange 2010 service on December 2. Watch for more information coming soon!

UD's High Performance Computing Cluster

Our deployment of the UD Community Cluster, a high-performance computing (HPC) cluster funded by IT and a group of 50 faculty and researcher stakeholders, is on schedule.

Penguin Computing, Inc. delivered the cluster (more than 5,000 cores) and the Lustre file system, with a usable storage capacity of approximately 200 Terabytes, to the Data Center. (PDF of presentation with images).

The Community Cluster planning team surveyed faculty stakeholders about their specific software needs. Their responses are helping us to determine installation priorities. In addition to compilers and scientific and graphics libraries, researchers asked for a broad range of application software.

IT is currently installing application software and compiler suites. The vendor has just enhanced the recommended compiler collection to exploit the Interlagos processor's architecture.

We are on target for public deployment on January 3, 2012.

For additional information on the Cluster, visit the IT Research Computing Web site or contact Dick Sacher, IT-CS&S at (302) 831-1466 or dsacher@udel.edu.

Tech Fair Participants Learn About IT Services

"I learned about some really valuable applications and programs that UD IT offers to faculty and staff for free."

That sentiment was echoed by most of the participants at the IT Tech Fair: Over 200 faculty and staff members asked in-depth questions about existing and emerging technologies at the fair, which was held October 19 in the Trabant University Center.

The fair emphasized hands-on technology stations to familiarize participants with technology available for them to use inside and outside the classroom.

Stations were set up to demonstrate technologies such as UD Capture, the UD Mobile Web, the new UD high-performance computing cluster, and hosting and virtual servers.

Many campus units were present to provide assistance:

- IT Academic Technology Services (IT-ATS);
- IT Client Support & Services (IT-CS&S);
- IT University Media Services (IT-UMS);
- IT Web Development (IT-WD);
- Student Multimedia Design Center;
- University Bookstore; and
- UD Online.

To review information available at the fair or to view pictures from the event, visit the Tech Fair Web site.

Planned Outages

UD Financials will be unavailable from 5:00 p.m. Friday, November 18 through Saturday, November 19 at noon as IT Management Information Services (IT-MIS) moves the data to new hardware.

Security, Privacy, and Safety

IT publishes advice about storing UD data in the cloud

In response to a request from the College of Agriculture and Natural Resources, IT released a document that offers advice to UD faculty and staff about using off-campus cloud service providers to store UD information. Storing information in the cloud makes sense in many situations; however, we urge faculty and staff to consider the sensitivity and critical nature of the information—and any applicable privacy and security policies, laws, regulations, or other restrictions—before storing University information on any non-UD server. For more information, see Advice about using Dropbox.com and other cloud services.

IT launches phishing education blog

We've created a new blog to help educate the University community about phishing scams—email or Web scams designed to trick people into providing personal information for fraudulent purposes: Phishing scams seen at UD. The new blog supplements our main phishing information Web page, contains links to other phishing resources, and includes information about reporting phishing scams.

Information about your UDeINet password

The UD Network page has been updated so that you can see if your UDelNet password conforms to the current UD password requirements. Log in to www.udel.edu/network and look at the "Your Account Information" section. If your current UDelNet password does not meet UD's password requirements, we urge you to change it to a longer password. New UDelNet passwords must contain eight to 30 characters. You can use the UD password checker to assist you in creating a more secure password. For more information about secure passwords, see the recent *UDaily* article *Is your password the weak link?* Current UDelNet password guidelines and other resources are listed on our Use secure passwords Web page.

Constituent Groups and Feedback

Each year, IT prepares a customer satisfaction survey to obtain campus feedback on central IT services. On November 1, 2011, an email message was sent to all faculty and staff inviting them to complete this year's survey. The survey will close on November 23, 2011. We'll compile the results of the survey and report on them in the next Activity Report. Feedback from the University community is important to us and helps us improve our services. If you missed the email about the survey, you can access the survey at www.udel.edu/001084.

Infrastructure

Upgrade to power at Data Center

To prepare the Chapel Street Data Center for the high-performance computing cluster (UD Community Cluster), server virtualization, and anticipated load increases, significant upgrades to the power and cooling systems were completed in October. The upgraded power plant now features a new 2-megawatt generator, 800 KVA/720 KW UPS, and transformers. New HVAC units were also installed, increasing the cooling capacity to 180 tons.

New features for WordPress service

IT-CS&S has added new functionality to sites.udel.edu, IT's WordPress service. Faculty, professionals, and small departments are finding sites.udel.edu now has many of the features needed to create a highly functional, nice looking, and manageable site. Some of the new features in WordPress are:

- New themes with customizable theme options (e.g., Twenty-Ten, Twenty-Eleven, and Clear Line).
- Enhanced "Udelizer" plugin that allows for custom CSS in any theme and the choice of all three UD header color choices.
- Google Analytics is now supported using any theme.
- WPTouch plugin is now enabled so that sites can be altered quickly for presentation on a mobile device.

Research Support

Position announcement: HPC systems programmer

To support our HPC offerings, IT is seeking an HPC systems programmer. Help us find the best candidates by spreading the word. The position description and application are online; closing date for submissions is November 18, 2011.

New version of Mathematica

You can download the newest version of Mathematica (v. 8.0.4) for Windows, Mac OS, and Linux from UDeploy. IT's campus site license allows UD faculty, staff, and students to install it on UD-owned or personally owned systems. To help you learn the software, Wolfram Research, Inc. provides many free online webinars on Mathematica.

Research computing workshops

About 50 faculty and students registered for scientific computing workshops offered at the beginning of November. Instructors from the Texas Advanced Computing Center and Mathworks offered training in C, C++, Fortran, and Matlab's Parallelization tools. IT research support staff assisted with hands-on lab sessions after the lectures. We offer these workshops periodically throughout the semester. We complement the workshops with Web-accessible archive sites such as Mathwork's MATLAB training site and XSEDE (formerly TeraGrid) member sites such as TACC.

We are offering two new workshops on geographic information systems (GIS) and GIS in the cloud this month. In addition, ESRI has created several new online *Virtual Campus Courses* on ArcGIS applications and made them available to UD under our ESRI site license.

Follow our research computing training offerings by visiting the Research Computing site and through IT's LearnIT@UD calendar. Or let us know of your needs for custom classes by contacting our IT Training & Education Coordinator, Jean Neff, IT-CS&S at (302) 831-8813 or neff@udel.edu.

Hosted GIS services

We're extending IT's regular virtual system hosting services to provide virtual ArcGIS server service. This service is a quick, cost-effective way to serve your map applications and services and geodatabases on the Web. Contact our GIS specialist, Ben Mearns, IT-CS&S, at (302) 831-1978 or mearns@udel.edu for further information.

Improved output for test scoring

You can now obtain the output generated by scan form processing as a PDF file format through UD's Dropbox service. When you submit forms for test scoring, you will now receive email containing a link to your files, providing you with immediate access to scanned results. The PDF file will replace the currently printed form, resulting in a greener process. Any additional files you requested using "extra options" on the control form will be included as part of the files provided through the Dropbox service.

Teaching and Learning

Winter Faculty Institute 2012: Save the date

Winter Faculty Institute 2012 will be a hands-on, experiential program by and for UD faculty. The facultyled sessions will be short and focused, often using a panel to explore different approaches to a single teaching issue. So save the date for an engaging and educational experience: January 9, 2012. For more information, visit the Institute Web site.

Sakai@UD mobile portal

A link to Sakai@UD's mobile portal has been added to UD's Mobile Web and to the apps for Android and iPhone. This portal provides a simplified interface for navigating to Sakai@UD tools on smaller mobile screens, which is suitable for checking for new or updated content on the go. Due to the wide range of browsers and capabilities provided by mobile devices, we recommend that you continue to use a non-mobile version of a supported browser to create content or submit assignments. To access Sakai@UD's mobile portal from either the Mobile Web or app, choose "For Students" then "Sakai@UD." Sakai will also default to the mobile portal if you access it directly from most mobile devices.

New Sakai@UD blog

IT-CS&S now publishes a Sakai@UD blog. This new blog is intended to be a central communication and client education home base, hosting articles related to training, faculty practices worth replicating, tips and tricks, and much more!

Tim Stelzer on campus for two presentations

Lecturer and research associate professor at the University of Illinois at Urbana-Champaign, Dr. Tim Stelzer has been heavily involved with the Physics Education Group at Illinois, where he has led the development and implementation of tools for assessing the effectiveness of educational innovations in introductory courses and expanding the use of Web technology in physics pedagogy. He was also instrumental in the development of the i>clicker[™]. Dr. Stelzer will be on campus in December for two presentations. Find out more about Tim Stelzer.

• Session 1: Using Web-based activities before lecture to transform student learning in lecture December 9, 10:00–11:30 a.m.

Students' unprecedented access to content on the Web provides a unique opportunity to transform the role of lectures in education, moving the focus from content delivery to helping students synthesize content into knowledge. Stelzer will discuss the pedagogical motivation for introducing Web-based activities and the impact they have had at the University of Illinois, including published outcomes data that demonstrate the effectiveness of using Web-based activities to enhance learning.

Register for Using Web-based activities before lecture to transform student learning in lecture.

• Session 2: Models and best practices for using clickers in your classroom December 9, 1:30–3:00 p.m.

This session will promote ideas for engaging students during lecture and best practices for using clickers in class. Conversation about the pedagogical strengths regarding the original i>clicker's simplistic design compared to enhancements available in the newest version of the technology will be promoted. Several UD faculty members will share their insights, and we encourage your active participation.

Register for Models and best practices for using clickers in your classroom.

Business Systems

PeopleSoft upgrade

IT-MIS successfully upgraded the Student Administration PeopleSoft (UDSIS) application from version 8.9 to 9.0 and moved to a new database as well as new, faster hardware. The upgrade started in the evening of October 13 and was completed on October 16. We implemented a new configuration setup that harnesses the power of new and faster servers. We also added a front-end load balancer and four separate application servers to increase the speed and reliability of the application.

The Financial PeopleSoft application (UD Financials) upgrade is on target to go live in spring 2012 as scheduled.

Web Registration enhancements

IT-WD and the Registrar's Office completed several enhancements to UD's WebReg system (www.udel.edu/webreg) and will roll them out in November for spring semester registration. To help gauge demand for courses, the Registrar's office will test a wait list for select departments. Students will be able to join a wait list for courses in a participating department even if the enrollment is full.

We have also upgraded WebReg to allow administrators to override normal restrictions on adding courses, allowing the Registrar's Office to directly sign up more students through WebReg instead of falling back on traditional UDSIS processes. In particular, appointment overrides will reduce the daily workload on the New Student Orientation (NSO) Office, the Registrar's Office, and the Production Control staff during the summer NSO period. Finally, the display of co-requisites and pre-requisites for courses has been fine-tuned to provide a more informative and accurate experience for students. WebReg is available to students in UDSIS or at UD Mobile Web.

Enhancements to the Effort Reporting System

The Effort Reporting System is a federally required process that assures government sponsors that the University is spending funds appropriately. In response to the recommendations of an external audit, the effort reporting and certification system now includes a third period that separately tracks the summer pay of faculty on academic contracts. Since summer research activity is outside of a faculty member's normal contract requirements, isolating the activity in a third period will make the effort reporting process more intuitive, clearer, and transparent. More information and training about the effort certification process can be found at www.udel.edu/research/training/efforttraining.html.

Links to graduate student contract and funding forms in UDataGlance

UDataGlance has clickable links for many Web Forms to allow for easy reference by users. As requested by UDataGlance users, the Student Funding Account Form (SFAF) and Student Account Credit Form (SACR) have been added to the list of Web Forms available for direct UDataGlance viewing. This change was put into production in mid-October.

Cancellation of SACR, GSCRF, and SFAF forms

The Student Account Credit Form (SACR) and the Graduate Student Contract Form (GSCRF) with associated Student Funding Account Form (SFAF) have been available to campus clients for some time.

However, the ability to cancel these Web Forms was limited. IT-WD and the offices of Graduate and Professional Education and Student Financial Services have created a cancellation process and related procedures for these Forms. To simplify the process, you can originate a cancellation with a click of a radio button. The cancellation form is then automatically routed to appropriate approvers and copies are sent to all individuals listed in the original form. Associated course, billing, and financial changes due to a cancellation will automatically be processed to reverse the previous transaction. The final phase of testing is nearly complete; we anticipate that these Forms will be available to campus clients during November.

Purchase orders through email

A long-range goal of the Procurement Office has been to implement the PeopleSoft function of dispatching purchase orders not just by fax or printer but also by email. This month, IT-MIS implemented two fixes to PeopleSoft programs that allow the email dispatch to work, thereby providing a new option to clients.

Graduate student contract processing

In September and October, graduate contract processing was updated to better handle students that were accepted, charged, and then dropped out or did not attend. Those students were being dropped from student records, and the academic plan was being lost for the credit due to the department. IT-MIS added programming to retrieve the academic plan from charges earlier in the semester. This process improvement eliminates manual journal vouchers by departments and the Budget Office.

Oracle Data Guard Standby database implemented for Web Forms database

IT-MIS implemented a "standby" database instance for the Web Forms applications in a process similar to how the PeopleSoft production databases are handled. The standby resides in the Disaster Recovery area and provides an additional layer of data protection and backup. It also provides for a formal process to re-establish access to critical Web Form data in the event of an emergency. We have established a reporting instance for non-critical data reporting to alleviate query requirements against the transactional production database.

Database for CCEI

Catalysis Center for Energy Innovation (CCEI) requested a database on research informatics and personnel/finances. CCEI needed this database for reports required by the Department of Energy (DOE). Currently, the reporting is handled manually. IT-MIS created a page within PeopleSoft financials and provided access to CCEI staff, so they can use it to generate reports as well as to maintain their data.

Event Production and Media Services

National and local programs produced in East Hall

In August, the UD and Foreign Policy Association signed a second 3-year agreement to produce the nationally distributed PBS *Great Decisions* political television series in the IT-UMS East Hall production studio. UMS video production equipment and staff were once again at work in late September producing the 8-part series for 2012.

Comcast continued to utilize IT-UMS video production equipment and crew to produce their local *News Makers* series in both English and Spanish. Prominent political and business leaders from the region were recorded in the East Hall studio during full-day productions in September and October. Comcast will return for additional full-day shoots over the next 2 months and has already signed on for 10 more recording sessions in 2012.

Room View monitoring upgrade

IT-UMS Classroom Technology will expand and upgrade their Room View monitoring system. With the planned expansion of new classroom spaces due to the renovation of Alison Hall as well as the

construction of the new ISE building, IT-UMS will have the necessary monitoring/response capabilities as the spaces come on line.

Training Opportunities

Screen capture tool options

We've offered over 40 training sessions this fall, including several new topics. One new session, Screen Capture Tools for Teaching and Learning, provides an overview of several screen capture tools (some free) that are valuable tools for teaching, training, and communicating information. During this session, we demonstrate how easy it is to record the keystrokes on your computer (you can add narration with some tools) then quickly send your recording to someone or save it for future use. Featured tools include built-in Windows and Mac screen capture options, Jing, Camtasia, and UD Capture. Some examples of how participants said they plan to use screen capture tools include:

- Record directions or steps for tasks new employees need to perform;
- Set reminders for tasks performed infrequently;
- Add comments to student papers; and
- Capture details instead of, or in addition to, written documentation.

View the Web site created for this session.

Custom training

Requests for custom training increased this fall. Our approach is to meet with staff, assess what the group needs, match those needs with the best IT tool(s), and then provide the necessary training.

If you'd like to request customized training sessions, please contact the IT Support Center. To browse through the sessions on the fall calendar or view our recorded sessions, visit our LearnIT@UD Web site.

IT Support Center

We would like to remind you of the various ways to get help with your IT questions. You may find your answer on our Web page: Just click the IT Support Center link on the IT home page.

However, if you don't find your answer there, it's always best to contact the Support Center rather than an individual IT staff member.

When you contact the Support Center directly, you will ensure that the appropriate IT expert will answer your question quickly.

For 24/7 service, use one of the following options; both will enter your question directly into our tracking system:

- Submit a request for help via our Help Request form, or
- Send an email message with your request to consult@udel.edu.

Or you can contact us, Monday through Friday, 8:00 a.m. to 5:00 p.m.:

- Call us at (302) 831-6000, or
- Text us at (302) 722-6820.

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