Cursor

Carnegie Mellon COMPUTING SERVICES

www.cmu.edu/computing/

The newsletter of Carnegie Mellon's Computing Services division

CHANGING to Better Serve You!

The Computing Services division has made major organizational changes and is in the process of some long term projects—all to better meet the needs of our campus community. This issue of *Cursor* highlights some of our efforts.

Computing Services Reorganization

Carnegie Mellon has made significant commitments to revitalize its information technology (IT) infrastructure. As this revitalization directly involves the Computing Services division, we recently reorganized to more efficiently reach our new goals. Highlights of the organizational changes are included here.

The department formerly known as "User and Educational Services" was split into Academic Technology Services (ATS) and Global IT Services (GITS). These separate entities will be better able to focus on their respective objectives.

Academic Technology Services provides IT services that support teaching and learning. The distinction for ATS has been an increase in true collaboration with campus partners. Through regular meetings with academic departments, ATS has gained a deeper understanding of faculty's technology needs for teaching and learning. To effectively provide sup-

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S3 Progress Report

Last year, Computing Services announced our long-term plans to develop a new suite of services that will replace our current Student Information System (SIS). We are pleased to announce that development of our Student Services Suite or S3 project is on schedule. Our most current work will result in the culmination of two business processes: Student Billing and a more robust Student Account Aging. These processes will be operational in late August 2009 with additional processes to be phased in later.

Under the old SIS, students could view their account online, but not their actual bill. Also, semester invoices and monthly bills were intermixed causing confusion for our customers and resulting in poor customer service by the university. We feel strongly that online billing will increase student satisfaction, lower our costs, and help us to collect tuition dollars in a timely fashion. The new combined monthly bill will offer

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New Home for Administrative Services

In our continued efforts to improve reliability and maintainability, the Human Resource Information System (HRIS) application will be moving from Typhoon to a new server this spring. Several systems and services have already been transitioned to new servers over the last year, including the Credit Card Processing System, web access to Oracle Financials and the Student Information System. This move should have minimal impact to the campus since HRIS users don't access the server directly. More details will be provided in the coming weeks, and information about the previous transitions can be found at **www.cmu.edu/computing/news/status/typhoon.html**.

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port for teaching and learning, ATS will partner with groups across campus; specifically with the Eberly Center for Teaching excellence, the Office of Technology in Education, Academic Development, University Libraries, academic departments, faculty and students.

Academic Technology Services

- Cluster Services
- Computing@CM
- Media Technology

In consideration of the university's worldwide initiatives, the primary goal of GITS is to expand our Pittsburgh-focused services and support to a more global-focus. Because our IT services are located in time-zones around the world, GITS works under the assumption that someone is likely to be using them any hour of any day. For this reason, GITS also oversees the division's disaster recovery and business continuity efforts as well as its research into a new data center.

Global IT Services

- Communication & Documentation
- Disaster Recovery & Business Continuity
- Liason Services for Global Campuses
- Telecom Front-line Services
- User Services (Desktop Support Program & Help Center)

Our infrastructure support was consolidated by joining the Production Services and Hardware groups with the Network Services team.

Network & Production Services

- Cable Plant
- Hardware Services
- Network Design, Development & Operations
- Production Services
- Telecom Back-line Services

Database and Infrastructure Services was moved from Administrative Computing (AC) to our Infrastructure Services, Applications and Middleware group. This will aid efforts to build our infrastructure and will assist us as we respond to the many security and audit related issues we face today.

An updated organizational chart is available at **www.cmu.edu/computing/about/OrgChart.pdf**.

S³ Project - continued from page 1

two separate sections: one for semester invoices and another for monthly bills. Students will have the ability to view an actual copy of the current bill as well as a repository of all past bills. These bills will be downloadable and printable. To help us determine the most effective format for the new bill, Computing Services has been working with two Pittsburgh based firms, Summa Technologies and LotterShelly.

The Student Services Suite is not just a set of services, but a complete solution based on Services Oriented Architecture (SOA). SOA is a paradigm that promotes modularity and reusability. S³ is comprised of a series of projects that will span the next five years. Because of this, milestones that represent fully operational products will be completed and usable at different points throughout the project life span. Tom Vrana, assistant director of enrollment services explained, "The nature of the Student Services Suite work dictates that we 'rebuild the ship as it sails.' This challenge makes SOA the ideal architecture. The modularity inherent to SOA creates a less tightly coupled system where pieces of functionality can be built and integrated without a negative impact to the overall system."

Parviz Dousti, principle software engineer and lead architect for S³ told us, "To develop the billing piece alone would be a much smaller effort than what we are doing now. By laying the groundwork for SOA we will eventually have a set of infrastructure services that are usable for other applications. Additionally, SOA's modularity simplifies the process of updates, replacements and load balancing."

Another faction of this project is the development of a road map to determine which business processes we incorporate next and if the modules for those processes should be built in-house, purchased, or if we can adapt freeware to our needs. Some examples are an admissions and a financial aid module. The admissions module could be built in-house to meet our unique academic requirements; however, based on frequent and universal regulatory changes that affect the way we process financial aid, it might be more cost effective to purchase an existing financial aid module. We also look forward to incorporating modules from Kuali Student; a next-generation student system that is currently under development.

As the Student Services Suite project progresses, it will address the needs of campus while building a software framework that serves us well into the future.

Wireless Bandwidth Limits Increased

Effective immediately, our Network Services group has modified the bandwidth limits on the campus wireless network.

Total bandwidth usage on the wired network is a generous 2 gigabytes (GB) per day, to and from the commodity Internet (see **www.cmu.edu/computing/network/services/internet.html**). The limits on the wireless network have now been raised to 2 gigabytes to match the wired network.

Previously, the wireless network had stricter limits of 750 megabytes (MB) per day regardless of the traffic source or destination. This meant that traffic to and from the Internet counted against the daily limit, as well as traffic from campus sources such as Blackboard or a streaming video server. The lower limits on wireless were implemented to compensate for the slower speeds of the aging campus wireless infrastructure. Since the Wireless Andrew 2.0 upgrade was completed in January 2009, the wireless network now supports speeds in excess of 100 Mbps, making the lower limits unnecessary.

For more information on campus network bandwidth limits, or to monitor your bandwidth usage, please visit **www.cmu.edu/computing/network/bandwidth/**.

Choose Your News Source

The *Cursor* newsletter is published on an as needed basis, but our computing news and announcements are updated daily through a variety of outlets. You can choose the way you want to receive your computing news.

News via the Web

News articles are published on our news web page at **www.cmu.edu/computing/news/**. There you will find general computing, security and outage news.

News via RSS Feed

The same news headlines available from our news web page can easily be added to your favorite RSS reader (e.g., iGoogle, My Yahoo, Outlook 2007). If Outlook 2007 is not your current email client, you may want to consider using it and its RSS feature. Computing Services recently introduced Autodiscover which makes configuring Outlook easy (see **www.cmu.edu/computing/news/general/2009/feb/020909autodiscover.html**).

News via the Portal

Computing news headlines are also published on our headline portlet within the Carnegie Mellon portal.

Security News via Mailing List

Concerned with computing security? Subscribe to our compserv-security mailing list. You'll receive notices in your email "Inbox".

For help with subscribing to these services, see "Getting News" at **www.cmu.edu/computing/news/getnews/**.

Hearth Room Training Area Gets Makeover

Computing Services and Human Resources recently partnered to upgrade the computer training area in Whitfield Hall's Hearth room. The Hearth room facility is primarily used for staff technical training. The major goal of this project was to make the space more conducive to teaching and learning. To that end, the layout was reconfigured and the outdated computers, monitors, lecterns, chairs and sound system were upgraded. Moving forward, a second goal of the project will be to implement a three-year refresh cycle for the computer hardware.

A number of Computing Services departments provided assistance with this project. Cluster Services evaluated and provided layout and design recommendations that would optimize this teaching and learning environment. Our Desktop Support Program (DSP) helped with the purchasing, configuring, testing and installation of the computers, monitors and monitor arms. MediaTech updated and integrated the audio and visual systems with the video conferencing and touch panel control systems. These components now offer a look and feel more consistent with registrar classrooms and other teaching and learning areas on campus.

How Safe is Your Computer?

"An ounce of prevention is worth a pound of cure"—a very old adage that applies to modern day computer malware attacks.

Everyday computing can be made miserable by viruses, worms and other forms of malware. These uninvited infiltrators rear their ugly heads in pop-up advertisements, performance slowdowns, or computer crashes. Once they compromise your computer, removal can take hours of time by a trained professional. Malware can be avoided by following some simple, proactive steps:

- First, install and update your computer's anti-virus and anti-spyware software. Campus affiliates can download Symantec (Windows) or Norton AntiVirus (Mac) free at **www.cmu.edu/computing/software/all/symantec/.**
- Exercise extreme caution when opening email attachments. Only open files that you are expecting. Even if the email is from a person or organization that you trust, be aware that malicious parties may have falsified the "from" address.
- Be cautious when visiting web site links that you receive in email or instant messaging. Viruses can send automated messages instructing you to click on a web link for funny photos, etc. These messages often originate from victim computers using falsified addresses and account names.
- Overall, if you receive an unexpected file or are even remotely suspicious of a file's origins, verify in person, over the phone, or via a separate email that it was sent by a trusted party.
- Keep your operating system updated with the latest security patches by configuring your computer to run automatic updates; for help, see: **www.cmu.edu/computing/doc/security/vista/auto-update.html** or **www.cmu.edu/computing/doc/security/win-xp/ms-update.html** or **www.cmu.edu/computing/doc/security/mac/softwareupdates.html**.

The latest security news is available on the Information Security Office (ISO) website at **www.cmu.edu/iso/**. To learn how to receive security news in your email inbox visit **www.cmu.edu/computing/news/getnews/**.

DSP Customer Corner: Tips for Reporting Issues

Those who subscribe to the Desktop Support Program (DSP) can help us to ensure the program's efficiency and effectiveness. As you submit your issue, consider these guidelines in determining if it is critical or non-critical in nature.

Non-critical issues are general problems, projects and questions that, while they may cause inconvenience, do not result in work stoppage and can be addressed within a few days or during the next visit by your consultant.

All non-critical issues should be reported to **dsp@andrew.cmu.edu.** A consultant will contact you to schedule time based on your department's Service Level Agreement.

Critical issues are those which immediately stop you from performing your job and cannot wait until your next visit from a consultant.

All critical issues (and issues that prevent you from sending email) should be reported by calling 412-268-6959 or the support line assigned to your group.

When reporting an issue to DSP, please include the following information:

- Severity of your issue - does this stop you from working or can you work around the issue temporarily?
- What were you doing immediately prior to the issue?
- Are others in your department experiencing the issue?
- The version of your operating system and the program(s) you were using at the time of the issue.
- Have you already reported the same unresolved issue to DSP or the Help Center?

For more information about DSP services, visit **www.cmu.edu/computing/repair/dsp/**.