

ITG Partners with the Samberg Institute to Roll Out Canvas

This fall, MBA electives and the EMBA-NY first semester core courses will be administered in Canvas, the replacement for Angel. MBA and all EMBA core courses will be migrated to Canvas in the spring and EMBA electives will migrate in the summer. All courses will be on Canvas by summer 2013.

Fall courses are currently being built as part of the administrative training process, assuring administrators' mastery of Canvas. Administrators are also acquiring important intuition about the design of the courses. This migration process concluded on August 1; courses are available to professors to edit and refine. To gain access to your course contact canvas@gsb.columbia.edu. Professors teaching this fall are invited to meet with the Samberg/Canvas training and support team a few times before their course begins.

ITG has partnered with the Samberg Institute in to address the technical and instructional needs of Columbia Business School faculty members, staff, and students. The Samberg Institute is focused on developing best practices in course design, training, and migration, while ITG lends expertise on support and integration.

Research Grid Adds GPU Capability

Usage of the graduate School's Research Computing Grid has increased dramatically in the last year with more than 50% more users and a doubling of RAM and IO capabilities. To meet these demands, ITG has been continuously improving the grid.

ITG has added queues with time limits to automatically free up resources from runaways and forgotten jobs in addition to adding interactive-only queues and updated software for a better interactive experience.

The newest improvement is GPU computing capability. ITG has recently added two GPU-enabled computers and two Nvidia Tesla M2075 GPU cards, each with 448 compute cores. Industry researchers have reported that GPU computing can dramatically accelerate computations. In-house tests confirmed this through second-order wave equations and a 330 percent increase in speed over the already blazingly fast dual-intel 6 core Xeon processors.

Both Matlab and Mathematica are already GPU-enabled, so researchers can easily take advantage of this resource today. The Cuda toolkit is also available for those wishing to accelerate their custom code.

To learn more, e-mail research support at researchsupport@gsb.columbia.edu.

Dan Mechanic, Research Comp. Admin., 212-851-9298

What is GPU computing?
<http://www.nvidia.com/object/what-is-gpu-computing.html>

To learn more about the Nvidia Tesla M2075, visit:
http://www.nvidia.com/docs/IO/43395/BD-05837-001_v01.pdf

To learn more about Matlab and GPU, visit:
<http://www.mathworks.com/discovery/matlab-gpu.html>

To learn more about Mathematica and GPU, visit:
<http://reference.wolfram.com/mathematica/guide/GPUComputing.html>

To learn about coding with CUDA, visit:
<http://www.nvidia.com/content/cuda/cuda-toolkit.html>

To learn more about the Dell c410x GPU chassis, visit:
<http://www.dell.com/us/enterprise/p/poweredge-c410x/pd>

ITG Technology Today

Save this Date

Research Grid
Training Sessions

Sept. 11, 2-4 p.m.
Uris 301

Canvas Training and
Support

The Canvas Team is currently running on-demand training sessions for faculty members. To arrange training, please e-mail: canvas@gsb.columbia.edu.

Classroom AV
Training

The Multimedia Group is happy to conduct personalized sessions on any technology in the multimedia portfolio anytime by appointment. Please call 212-853-3695 or email mmgroup@gsb.columbia.edu.



Welcome from the CIO

Welcome to the inaugural edition of Columbia Business School's ITG Technology Today!

Columbia University uses a federated IT model, where the University has primary responsibility for maintaining much of the campus infrastructure (such as the Internet connection, user IDs, and datacenters) and each school is responsible for all other IT functions, including the selection, deployment, programming, operation, and support of school-specific software, applications, and Intranet sites, etc.

The Columbia Business School Information Technology Group (ITG) has a large portfolio of projects and initiatives under way for the 2012-13 academic year. We would like to use this newsletter to keep you posted on some of these initiatives and also provide periodic updates on some of our day-to-day support activities.

We welcome your comments, suggestions, and criticism on our services and how we can help.

Donald Lemma, CIO
212-854-8674
donald.lemma@columbia.edu

From the Project Management Office

ITG has created a new IT Project Management Office (PMO).

As we begin the new fiscal and school year, the new IT Project Management Office (PMO) is implementing a new project management framework and methodology for the Business School. We are introducing material first within ITG and providing training classes for the foundational elements on which the framework is built. All of our technology projects will execute according to this methodology. We are also training project managers on basic project management techniques. Our goal is to help our managers deliver their projects on time and within budget. We're also striving to ensure that the delivery of technology projects and solutions is predictable, understandable, and consistent. We will also provide a monthly dashboard detailing the highest priority projects in our portfolio.

The PMO is also responsible for several other areas within ITG. We handle service management, which includes tracking incidents (normal help desk calls) and problems that are received on a daily basis. We also manage cyber security for the School with a new candidate that will be starting in a few weeks. This function will set security policy that aligns with business risks and regulations, as well as CUIT requirements, and help us manage IT risks and controls.

Should you have any questions or feedback, please feel free to stop by my office (Uris 202) at any time.

Cheers,
Howard Miller, Exec. Dir., PMO
212-854-9001, hjm2123@columbia.edu



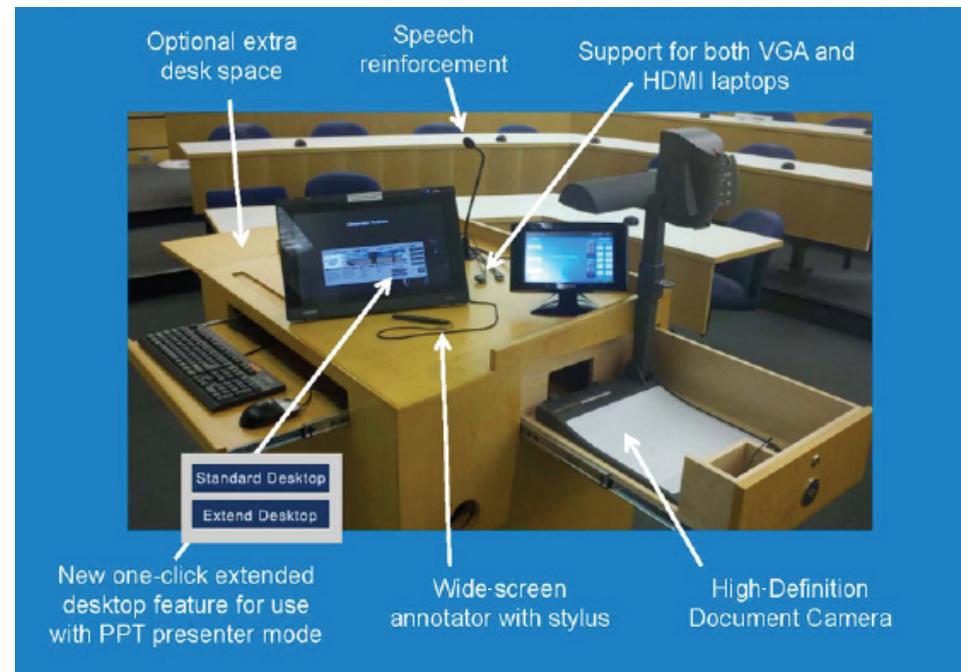
A Trillion Bytes Here, a Trillion Bytes There...and Eventually You Run Out of Disk Space

As more of our daily activities and interactions become digitized, our data storage requirements increase at a geometric rate. The School provides 55 Terabytes (55,000,000,000,000 bytes) of usable high-performance network-accessible disk space for storage of this data. This is in addition to the petabyte (1,000,000,000,000,000 bytes) of storage space that exists on the 1000+ local hard drives of the Schools faculty and staff. In January of this year, approximately 95 percent of the network storage had been utilized, resulting in frequent issues with degraded network performance due to the limited availability of storage, or system crashes due to the unavailability of storage.

To address this issue, the School has just obtained an additional 84 Terabytes of usable high-performance storage, thanks in part to the generosity of an in-kind donation from EMC, facilitated by their CEO, Joe Tucci, who sits as a member of the school's Board of Overseers.

This additional storage should meet our expanding requirements for the next two years and will host everything from large datasets used on our research computing grid, to video files that need to be streamed at high speeds, to (expanded) individual and group data storage. In addition to this disk array, which will be hosted in the datacenter adjacent to Uris Hall, we also obtained a second storage array that will be hosted in Warren Hall and will provide real-time replication for most of the data, reducing our risk and recovery time in the event of a catastrophic incident.

Don Lemma, CIO
Tom Lin, Director, Infrastructure Services



ITG Completes Major Upgrade

This summer, ITG completed a major upgrade: a complete replacement of the AV systems in 16 classrooms. These classrooms had core control systems that were at least 10 years old and unreliable PCs and projectors.

The upgrade was driven by the desire for a higher quality podium, more stable system performance, and better uptime resulting from new installation and the new remote monitoring functionality that is part of the new IP-enabled control systems. The upgrade enables significant improvements in image quality, with much brighter, high-definition, wide-screen images and the addition of document cameras as permanent fixtures in each room. Each upgraded classroom now has voice reinforcement from a podium microphone and available lavalier mic, which had previously only been available in the larger rooms. High-definition cameras have been added to every room alongside new ceiling microphones and digital audio signal processors for greatly improved lecture captures. A popular feature of the new custom designed solid maple podium is a hydraulic lift controlled from the touch panel that raises the height of the podium an optional 10 inches for comfortable access to the keyboard, annotator, and teaching surface to better accommodate taller professors.

Please make an effort to stop by to get a feel for the new systems prior to teaching your next class. ITG's Multimedia Services Group will be offering the usual training sessions prior to the start of the semester to provide an orientation to these systems and to other teaching technologies that ITG makes available. As always, please contact mmgroup@gsb.columbia.edu or 212-854-3695 with any questions or feedback.

Chris Bellerjau, Director, ITG MultiMedia Services

Bloomberg Terminals

Bloomberg terminals are being installed in Uris and Warren Halls over the summer as part of the Bloomberg L.P.'s university initiative. School constituents will now have easier access to Bloomberg's extensive financial services, news, and analytical tools. The distinctive dual-monitor offers a larger landscape to present and view information, graphics, and analytics. Signing on to a terminal will be as simple as logging on to the existing express kiosks. Additional terminals will also be available in the Watson Library and designated locations on faculty floors.

Ray Morales, Sr. Dir., Tech. Services. 212-854-1810 rm2525@columbia.edu