Mobile UB (mUB)
Creating Informal Learning Spaces for Mobile Computing

As our students arrive on campus with multiple mobile devices and access to the UB wireless network expands, more and more UB areas are becoming "informal learning spaces" for students where they can work individually and collaboratively. The CIT public sites computing group and University Libraries staff, with assistance from Student Affairs and Institutional Analysis staff, invited the UB Advocates student volunteers to tell us what they needed in these

informal learning spaces. Team members also made site visits to look at informal learning spaces at several top U.S. universities. Among the team's findings were that students needed places where they could collaborate with others as well as do individual work, and that lighting, privacy, 24/7 availability, comfort, and flexibility of the furniture (its ability to be reconfigured to support multiple uses), were very important, as were access to the UB wireless network, power, and tools such as whiteboards and projectors.

In December, an "incubator space" where students could use different types of furniture, moving it around as desired/needed, was created in the Capen Third Floor Cybrary with furniture on loan from vendors. Students were encouraged to provide feedback about the usefulness and comfort of each piece and a photo journal was created, showing how students used the furniture and configured the spaces. We will be using this

student feedback as we design informal learning spaces at UB.

This spring the CIT and Libraries group will set up several new spaces for mobile users. Bell 101 will provide new seating and work surfaces for mobile computing device users, and group collaboration spaces will be created in Lockwood. Stay tuned for more information in the April newsletter!

From the Desk of the CIO

Happy New Year! This issue of the newsletter provides updates on our mUB—mobile UB—computing initiative, as well as updates on UB2020 information technology (IT) Transformation projects. Here is a quick status report on UB2020 IT projects.

- *Telephone System Consolidation - VoIP:* The 3-year rollout plan is underway, and more than 1200 VoIP phones have been installed. Installations are moving forward at an accelerated pace, with IPLogic technicians assisting in the installations. The implementation timetable is available at: www.buffalo.edu/ub2020/itst/voip_imple_order.html.
- The *Workstation Standardization* team partnership with Dell continues to provide the campus with deeply discounted desktop and laptop machines. Cost reductions of approximately $2M for equipment purchases will be realized this fiscal year. Negotiations with Apple have also resulted in discounts on institutional and individual, faculty/staff purchases. Visit the UBMicro Web site to view the UB2020 Apple and Dell discounted pricing: www.ubmicro.buffalo.edu.
- The *Strategic Information Reporting Initiative (SIRI)* - The SIRI team, charged with aggregating and integrating the various sources of information that are important to the strategic and operational concerns of the university, is working to deliver financial and human resource data, reports, and dashboards to the community by the end of February.

- *Server and Services Consolidation* teams
  - *Email and Calendaring:* Work is moving forward to consolidate campus email services into a campus Unix service and a campus Exchange service.
    - The Exchange email pilot is slated to begin in March. The team is testing backup and recovery tools for the new environment. Microsoft will be on-site in February to review the production setup of the Exchange 2007 infrastructure before the pilot begins.
    - The Unix email team is testing an upgraded filter tool, spam quarantine and management tool, and alias management tool. Testing of authenticated smtp and evaluation of calendaring tools are also underway.
  - *File Services*: Consolidation of all standard file services on campus into one service instance, using the current UBFS replacement project as a technical base is moving forward. UBFS migration of user space has been completed and shared space migration is targeted to finish by early February.
  - *Antivirus/Patch Management/Firewall*: A campus firewall solution for workstations and servers has been adopted; the first phase implementation of patch management infrastructure will be completed by the end of January; and antivirus and workstation imaging solutions have been adopted for the campus.
- The *Student Systems* team selected a software vendor, Oracle PeopleSoft, and is laying the groundwork for implementation.
- The *Shared IT Service Desk* team has circulated an RFP to vendors and received responses from several vendors. Vendor selection demos are scheduled for early-February with vendor selection by the end of February.
- *ePTF:* The full suite of business rules for state transactions have been programmed into the ePTF application and are undergoing final review by HR.

Detailed information on all UB2020 IT projects can be found on the Web at: www.buffalo.edu/ub2020/itst/.

Elias G. Eldayrie - Chief Information Officer

Mobile UB (mUB) - UB Wireless Network Expansion and Student Priorities for the Expansion

The UB wireless expansion project, UB Wi-Fi, is a centrally-funded initiative with two parts: (1) upgrading all existing wireless devices to support current standards (both the Wireless "G" and Wireless "A" standards) and (2) expanding wireless coverage to cover all campus spaces where wireless access is useful. Specifically, the "B" cards in all access points are being replaced with wireless "G" cards, and "A" cards are being added in all access points needing them. Replacement and upgrade activities began in March, 2007, with completion of most projects by November, 2007, resulting in the upgrade of 259 access points and the replacement of 62 access points.

Currently, UB has deployed more than 500 wireless access points. Expanding wireless coverage to blanket the campuses will take place during the next few years with the installation of approximately 300 access points per year. The wireless expansion team is currently working in Capen Hall on the North Campus and Goodyear Hall on the South Campus. Updates and information on the wireless expansion initiative, including a building schedule, are available at: www.oss.buffalo.edu/files/Wireless-Order.pdf.

The wireless expansion schedule is continually being revised as we receive feedback from the University community on their needs for wireless access. The December 6th student MyOpinion survey in MyUB solicited student needs by asking students the following question: *"If you could make wireless access available in just one type of space on campus where it is currently not available or where the signal is not strong enough, where would that space be?"*

512 students who currently use their laptops to access the Internet on campus completed the survey. Student Residence Hall and UB apartment rooms received the largest number of votes (with 31% of the votes cast), with the lounges in the dorm/apartments coming in second with 26%
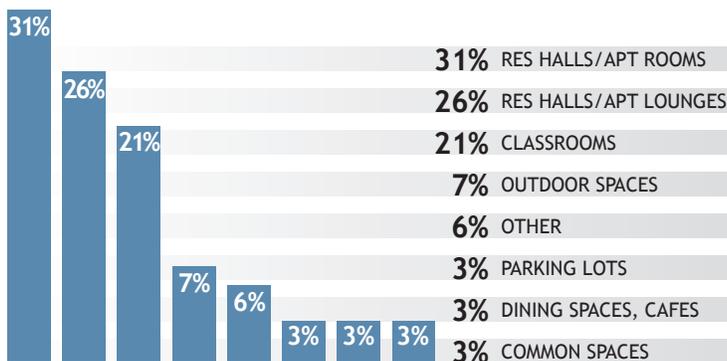
of the votes. Students mentioned the need to have wireless access in the Residence Halls/UB apartments to work on group projects and study together, as well as the convenience of being able to move about and work anywhere in their rooms. They also noted their desire for wireless access in the residence hall/UB apartment lounges. 51.5% of the students responding to the survey reported living on campus in the Residence Halls or apartments.

Classrooms were also selected as a high priority, receiving 21% of the votes cast. Students noted that in many of the large lecture halls, the wireless signal is strong in the back of the rooms, but weak in the front. The large lecture halls in Knox and NSC were specifically mentioned by many students as a very high priority for the wireless expansion. Students mentioned that when sitting in the back of these large classrooms the only way they can clearly see the materials being displayed and discussed by their instructors is to re-display the materials on their own laptops.

Since the survey was conducted in December, it was somewhat surprising that many students mentioned outdoor spaces and parking lots as top priorities for access, but this is clearly an area to be addressed as UB creates "learning pathways" as part of the campus master plan.

MyOpinion Survey: Students' Top Priorities for Wireless Expansion

Percentage	Category
31%	RES HALLS / APT ROOMS
26%	RES HALLS / APT LOUNGES
21%	CLASSROOMS
7%	OUTDOOR SPACES
6%	OTHER
3%	PARKING LOTS
3%	DINING SPACES, CAFES
3%	COMMON SPACES

Technology Classroom News

New UB*learns* course offers Technology Classroom Orientation

TC Orientation, a new course on UBlearns is now available. The course will be useful to instructors preparing to teach in a technology classroom for the first time, as well as those needing to refresh their memory and become aware of any new instructional technology features.

The TC Orientation course is comprehensive; however, it has been designed so you can quickly access the information you need by navigating the menu selections on the left side of the main course page.

The menu buttons include:
- Quick Start video – contains a short introductory video overview of technology classroom features.
- Room Attributes – offers an interactive touch panel tutorial, information on using various computing platforms, software, laptops, and many other room features.
- Cabinet Access – includes information on how to obtain a lock combination and open the technology cabinet.

Consider using the UB*learns* TC Orientation course to plan ahead, build confidence, and avoid uncomfortable delays at the start of class.

To enroll in the course:
1. Log into UB*learns* - ublearns.buffalo.edu.
2. Select the 'Courses' Tab, and enter 'TC Orientation' into the course search box.
3. Select 'enroll' for the course, then click 'Submit' and 'OK'.

Once you're enrolled, you can return to the course at any time by choosing the 'Courses' tab and looking for 'TC Orientation'.

IT Transformation News

Strategic Information Reporting Initiative (SIRI) Update

The SIRI team, charged with aggregating and integrating the various sources of University information important to the strategic, management, and operational concerns of the university, is currently working to deliver financial and human resource data, reports and dashboards to the community by the end of February.

Specific work includes field and data mapping (from current databases to the SIRI database), continued data definition, and the use of the Oracle Warehousebuilder tool (ETL) for data extraction, transformation and load. Data transformation results are being examined closely. Consultants from LPA Systems of Rochester are providing expertise and assisting with this work.

The SIRI Project Team, also charged with testing, designing, developing, and implementing reports and dashboards, is actively engaged in the design and build process using Oracle Business Intelligence Enterprise Edition (the business intelligence tool). This team includes staff from across UB. The reports and dashboards will be released to the SIRI Customer Team for review and will be extended to the campus after approval. Since the business intelligence tool is being bundled with Oracle as part of the SUNY contract, project leaders are hoping for increased collaborative efforts with our SUNY partners. Additional project work

includes development of a security model, a support model, and customer training.

Developing data models to meet campus needs for reporting is one of the largest challenges of the project because of the diversity of sources, inconsistencies, fragmentation, and other quality issues. People across campus have dealt with these issues in shadow systems over the years. The ETL and data modeling work SIRI is accomplishing will soon provide improved data for campus planning and decision making, and address issues so that campus customers do not have to massage data on a daily basis. Please visit the SIRI project Web site for complete information and updates. www.buffalo.edu/ub2020/itst/reporting.html

Shared IT Service Desk Update

The objective of the Shared IT Service Desk team is to provide University community members with an initial point of contact for IT support and improved IT support via the collaborative efforts of IT service providers across campus, using a common set of tools that include incident, problem, change, and configuration/inventory management and a knowledge base component. Eight vendors responded to the Request for Proposals (RFP) issued last Fall, and after evaluating the RFP responses, the team invited three vendors to campus to present and demonstrate their software in February.

If you are interested in seeing the vendor demos, you can meet the vendors at the following dates and times.

- **February 4, 2008**
  Shared IT Service Desk Vendor Demonstration
  HP Service Center
  1:00 PM - 3:45 PM
  120 Clemens

- **February 5, 2008**
  Shared IT Service Desk Vendor Demonstration
  BMC Remedy
  1:00 PM - 3:45 PM
  120 Clemens

- **February 6, 2008**
  Shared IT Service Desk Vendor Demonstration
  CA UniCenter Service Desk
  1:00 PM - 3:45 PM
  120 Clemens

More information and updates on the Shared Service Desk project can be found at: www.buffalo.edu/ub2020/itst/service_desk.html.

Mobile UB (mUB) - UBmail Mobile Is Available

You can now access UBmail with mobile phones, handheld computers, and PDAs that support the WAP/XHTML protocol. Devices must be capable of storing cookies and should have Javascript capabilities. Instructions on using UBmail from your mobile device are available at: ubit.buffalo.edu/ubmail/logginginubmailmobile.php.

Student Systems Transformation Project

After an extensive evaluation of our current student information systems and options for replacing these with an integrated software solution, the Student Systems team has selected a vendor, Oracle PeopleSoft.

Current project activities include contract negotiations with Oracle PeopleSoft, selection of an integration firm, and preliminary activities to lay the groundwork for implementation. Formal project planning will begin later in the spring semester.

Complete information and updates can be found at: www.buffalo.edu/ub2020/itst/ssa.html.

Computer Security News

New Year's Computer Security Resolutions *

This Year I Will

1. Install good-quality anti-virus software, anti-spyware, and a software firewall;
   - Microsoft: www.microsoft.com/protect/viruses/xp/av.mspx
   - Mac: www.clamxav.com/

2. Patch and update my security software, operating system, and software applications regularly and promptly;
   - Microsoft: www.microsoft.com/protect/computer/updates/mu.mspx
   - Mac: docs.info.apple.com/article.html?artnum=106704

3. Learn how to recognize suspicious web addresses;
   - More Info: cups.cs.cmu.edu/antiphishing_phil/quiz/index.html

4. Beware of lesser-known security issues, such as cellphone "bluesnarfing";
   - More Info: www.youtube.com/watch?v=dltjEnrePxc&feature=related

5. Be careful when using any wireless network--at home or on the road;
   - More Info: www.youtube.com/watch?v=pgBHjZUKW54&feature=related
   - More Info: www.youtube.com/watch?v=ScEaD-SikrM&feature=related

This Year I Will Not

1. Open email attachments unless I know who sent the message and what is in the attachment;
   - Microsoft: www.microsoft.com/protect/computer/viruses/email.mspx
   - Mac: docs.info.apple.com/article.html?artnum=108009

2. Click on links embedded in emails unless I know who sent the message, what the link is for, AND where it will take me;
   - More Info: www.nocpa.org/phishing/phishing-phisingcrime.html

3. Fall for official-looking emails that ask for personal or financial information;
   - More Info: www.microsoft.com/protect/yourself/phishing/identify.mspx

4. Fall for free offers of copyrighted materials, which may be tainted with malware, and BTW, may be illegal to use;
   - More Info: www.docbug.com/blog/archives/000455.html
   - More Info: www.copyright.gov/help/faq/faq-digital.html#p2p

5. Participate in online social networking-or allow my children to-without knowing the risks;
   - More Info: www.netsmartz.org/

* from SANS OUCH, the SANS Institute Security Newsletter for Computer Users, January 2008

Mobile UB (mUB) - Enhancing Cellular Coverage

Since many faculty, students, and administrators rely on mobile phones as their primary mode of communication, UB needs to greatly improve campus cellular coverage and capacity. At the same time, we want to avoid a proliferation of cell towers and rooftop antennas from multiple carriers in prominent places on campus. UB has signed an agreement with NextG (www.nextgnetworks.net/) to begin reinforcing UB's cellular network.

NextG Networks will install a single, distributed antenna network on campus that will improve cellular coverage and capacity for multiple carriers over the same infrastructure. And—best of all, there is no cost to the university. NextG is now negotiating with the individual carriers to secure their participation.

Research Computing News

Western NY Rural Area Health Education Center Proposal Funded

A joint proposal submitted by the Office of the Vice President for Health Sciences and the CIO has received funding of $5.9M from the Federal Communications Commission (FCC) to facilitate the creation of a broadband health-care network in the Western New York region, connecting public and nonprofit health-care providers in rural and urban locations.

The broadband health-care network will connect approximately 40 health care facilities at speeds of at least 100 Mbps, bringing telemedicine services to local areas where the need for access to specialists and critical life-saving treatments is most acute across the WNY region. Establishment of the network will enable experienced intensive-care doctors and nurses to monitor critically ill patients at multiple locations, make possible the delivery of continuing education to health-care providers across the region, and enable enhanced coordination of the health-care community's rapid response in emergencies.

For more information on the FCC funding program, see www.fcc.gov/cgb/rural/rhcp.html.

Putting Idle PCs to Work Using Condor

CIO and Center for Computational Research (CCR) staff are working to harness unused computing capacity in the UB public sites, making this capacity available to researchers needing compute cycles, using Condor. Condor is software developed at the University of Wisconsin. (Condor web site: www.cs.wisc.edu/condor/description.html) Condor converts collections of workstations into a distributed high-throughput computing facility, harnessing the otherwise wasted compute cycles from these resources for researchers.

At UW-Madison the Condor installation has served as a major source of computing cycles to faculty and students. UB's Condor deployment is planned for this spring semester. For more information about the Condor project, contact Matt Stock, Manager of Enterprise Research Computing Services at stock@buffalo.edu.