Summary of the 2007/2008 Year of Activity

The Mathematics Department Information Technology group (MathIT) actively maintains approximately 452 computers (403 Apple MacOS, 26 RedHat Linux, 23 Microsoft Windows). 10 of those machines are server-class machines in our machine room in B098: 6 Linux and 4 MacOSX. We centrally support 19 printer queues and manage 6 labs of instructional computers—the largest single instructional installation at the University. The Labs serviced roughly 2550 students in F07 and 2809 students in W08. In 2007, the Michigan Math and Science Scholars program of 267 high-school students was hosted in our labs. Math instructional labs are also used by other departments on campus for training and presentations. Internally, the Department has approximately 312 computing users: 148 Faculty, 19 staff and 145 graduate students.

From April 11, 2007 through April 10, 2008, MathIT handled some 780 request tickets, 758 of which have been resolved. While this number is up from the previous years (860 in 2004/5; 951 in 2005/6; 639 in 2006/7), its felt that due to the reduced number of walk-ins we've received, these numbers reflect the growing use of the help queue and remote control methods for delivering support. Graphs showing our ticket statistics are on the last page of this report.

This year was marked by personnel changes in the IT department. Roy Bonser departed for the Astronomy Department, and in December, Math hired Bennet Fauber from the Life Sciences Institute. Bennet was on-staff at Math previously, and we welcome him back into the Department, with his dedication to supporting Math users and uncanny knowledge of University underpinnings.

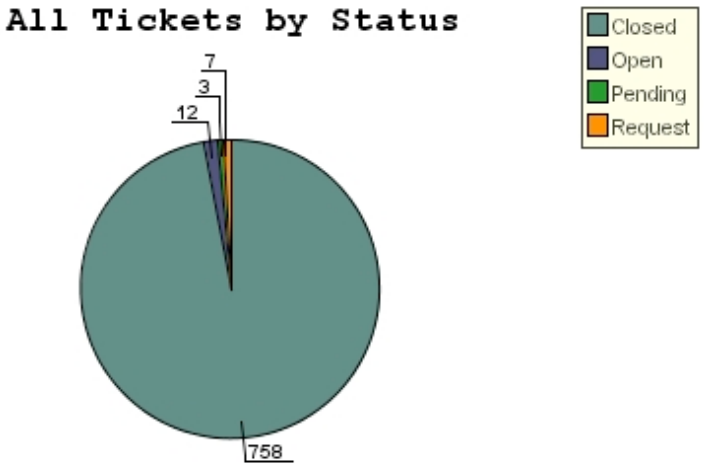
In Spring/Summer of 2007, we migrated our multiple MySQL databases into a single ITCS-hosted MySQL database, as planned. This involved moving some 73 tables from 5 independent databases into a single, unified space. It affected connections in the Administrative offices, but all changes were migrated smoothly to this central resource.

In our instructional labs, over Winter break, we upgraded 51 17" iMac-G5 machines to new 17" iMac Intel-based machines. This makes 4 of our 6 labs Intel machines, and evenly distributes the load between our 2 NetBoot servers. The outgoing machines will be deployed into Grad offices as mentioned below. The remainder have been transferred to Psychology, Physics, Astronomy, LSAIT and the Museum of Art, as they had much more dated equipment to retire from service.

As you may have noticed, we've begun working with Michigan Printer Service to more actively maintain our HP 8150 floor and lab printers. The 8150's are well-built, sturdy machines that should last for 7 years or more, with proper maintenance, and given the quality of current printers and the high cost of replacing a high-capacity printer like the 8150, it will be worth our efforts to keep them running.

In the coming months…

- We plan on migrating our DNS service fully to LSA-IT, which when combined with some of the extensions we pioneered last summer, will provide a single place to register and inventory any incoming machine, simplifying our handling of all machines: servers, labs, faculty desktops and personal laptops.
- 2 of the 3 major tasks in managing our labs are automated, and we plan on tackling the 3rd this summer. This last task involves reading data from the NetReg DNS/DHCP server (above) to automatically generate the contents of the groups representing each lab room or floor of the department. These groups are currently manipulated entirely by hand.
- We began an ambitious software project last year to automate the management of the Seminars web page and calendaring, and this year our staff will work during the summer to complete the project. When finished, it should dramatically reduce the amount of hand-work the office staff need to do to manage the Seminars, the weekly Bulletin and other related materials.
- This summer we are using the machines moved out of our labs to increase the graduate student machines from 48 (including the B723 lab) to 76 machines. Obvious goals here are to increase computing access for graduate students, but also to make better use of scarce office space—if grads are in a computing lab, they are not using their office space.
- Due to the relatively new fleet of machines in faculty offices, we will be focusing on upgrading faculty machines, only where they are well behind current technology. There are currently 13 machines on this list, where we normally would upgrade about 36. 2009's Faculty upgrade will be back on schedule, upgrading ¼ of the machines each year.
- MacOS 10.5.x ("Leopard") will be deployed in the Labs and on faculty desktops this summer. Upgrades are NOT mandatory at this time, but as machines become available, we will want to get them updated.
- Similarly, RedHat Enterprise 5 will be rolled out, as machines are deployed. Upgrades are NOT mandatory at this time.
- Interest in parallel and high-performance computing (HPC) seems to be growing, and we will be exploring possibilities to gain experience with configuring and using clustered computers so it will be better prepared to advise and assist faculty who may wish to use HPC techniques and equipment. Contact will be made with CAC and other units on campus that have experience or particular expertise in HPF/PC to see what resources may be available.



Between 4/10/2007 and 4/11/2008