

From the Director of ITS

Computer Distribution 2003

It seems like only yesterday that we had Commencement. Where did the summer go!? Of course, once again, ITS was a tad busy this summer. As is usual, the period between the end of finals in the spring and the arrival of first year students the last week of August is in many respects our most intense time of the year. This 14 weeks or so is the only time when we can accomplish our major projects, especially infrastructure upgrades and the deployment of new computer hardware. In some areas, the summer of 2003 involved the biggest projects we have ever attempted.

The largest project this summer was the deployment of new and reallocated computers. Beginning with department requests in the spring, allocation of resources to meet as many needs as possible, configuration and ordering of hardware from Dell and Apple, processing on arriving, and final distribution, Jane Robertson and her team of summer assistants have achieved remarkable success. Although some work carries forward as we approach September, Jane and her team, with assistance from all of her colleagues in Academic ITS, have carried out the largest deployment of computers ever attempted at Colby.

We normally purchase about 300 computers a year, but because of the uneven age profile of College-owned computers we purchased over 400 this year. We are decommissioning over 400 computers and donating them to

local schools after wiping all files and installing a basic system.

In addition, at least 200 used but still capable computers have been reallocated where they satisfy a need. That means the distribution team has had to handle over 1,000 computers this summer, an average of one every 30 minutes. The task does not consist only of taking the computer to its new home and bringing back the old one. Jane's group worked very hard to safeguard the migration of each person's files from the old computer to the new one, while ensuring the security and confidentiality of those files. We all owe Jane and her team and the staff of Academic ITS who supported the effort a big Thank You!

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New Features in Office X

Besides having the new Aqua look, Office X has been upgrade with some useful new features:

Context-sensitive Formatting: the new Formatting palette shows you different options specific to the content that's selected.

Discontinuous Selection: something that's always been available in Excel has finally been added to Word. Select some text, then hold down the Apple(command) key and keep clicking/dragging to select other text anywhere in the document.

Excel Autorecover: Excel X automatically saves as you work and recovers your data if your computer crashes.

Powerpoint Quicktime: in Powerpoint X, presentations can be saved as Quicktime movies with one menu command- (File | Save as Movie).

Worms Invade Colby

Blaster and Friends Have Arrived!

In recent weeks ITS has been busy clearing faculty and staff Windows computers of unwanted visitors- namely the Blaster worm and its variants. Unlike previous worms and viruses we've dealt with, Blaster does NOT travel by email attachment- it enters through holes in the operating system and spreads invisibly over networks.

How To Detect Blaster

Most infected systems show no symptoms. The only indication might be a message from your Sophos virus detector. Some systems might suddenly be very sluggish, or might shut down randomly. If Sophos detects the worm it will send a message to the Faculty/Staff support center, which will dispatch someone to clean the affected computer.

Cleaning and Prevention

ITS uses Symantec's FixBlast utility to remove the worm, then applies a series of "hot patch" system updates to close the security holes and prevent reinfection. We then check the computer's Sophos virus application to make sure its virus

definitions are current and it's configured to disinfect automatically. Users should double-check their own Sophos settings:

1. Start | Programs | Sophos Anti-Virus | Sophos Anti-Virus|
2. click IC Client tab
3. Options | configurations
4. click Action tab
5. check all "disinfect" options
6. check "infected files"-say OK to the message that comes up- then choose Shred.

Users can patch uninfected systems by going to the ITS main page at <http://www.colby.edu/its> and clicking the link in the Blaster story.

Student Computers

ITS is coordinating with the Dean of Students office to clean and patch arriving students' computers. We've provided each HR with a cleaning CD and instructions, and will notify them which computers are infected. Students will have one day to get their systems cleaned before their network access will be shut off- but they will not lose access to their email accounts. As always, it is essential that students have up to date anti-virus software.

Faculty Symposium on Information Ethics and Academic Honesty

a CBB one day conference
October 15th, 2003
9:15-4:30
Colby College Pugh Center

This event provides a forum to discuss the global issues of plagiarism for higher education. It will bring together faculty, librarians, technologists, administrators, and students from a range of schools to provide multiple perspectives on the ethical, pedagogical, and instructional problems and challenges that attend plagiarism. For more information see <http://leeds.bates.edu/cbb/events>

Funded by a grant from the Center for Educational Technology.

Tips for the New HP 4200 Printers

Printing from CARS

A few defaults need to be changed. Usually these are in the "PCL Menu":

- Form/Page Length should be increased from 60 to 66
- set "Append CR to LF" to Yes (or set "Line Termination" to On)

Using Letterhead- Preventing Automatic Tray Switching

From the printer menu panel choose:

- Configure Device
- System Setup
- Tray Behavior
- Use Requested Tray
- Exclusively (instead of First)

Faculty Take Note: OS X Now in Classrooms

All classroom computers have been upgraded to OS X. For help finding your way around this new system, contact David Pinkham of Media Services, x3510, email dpinkham@colby.edu.

New Features in Office XP

Windows XP is more user friendly and feature-packed than previous Microsoft systems; so is the Microsoft Office suite.

Smart Tags:

These impressive little yellow popups link you seamlessly to information on the Web. For example, typing in an address can take you to a map showing how to get there!

Excel Errors Clarified:

Mystified by DIV/0? Excel now explains most errors in plain English- and sometimes even how to fix them.

Speech Recognition:

If enabled and properly configured, this feature allows hands-free data entry.

Excel Header/footer Shows File Path:

no more mysteries about file location- writes the precise location of the file on your hard drive on the top or bottom of each page.

Wireless Computing at Colby: Not Ready for Prime Time

Wireless (sometimes referred to as WLAN or WiFi) networking is an exciting but young technology that has yet to reach maturity. Many students will arrive on campus with wireless networking devices, but may not be aware of the current issues and policies that pertain to them.

Wireless Computing Policies at Colby

ITS does not currently provide support for wireless networking cards, hubs or routers, and discourages the use of any of these devices on campus. Students wishing to employ wireless access points for their personal use are permitted to do so within their own room or office as long as ITS policies are adhered to. At some time in the future, it is likely that only college-owned and managed access

points will be permitted on campus.

Owners of wireless access points may be held accountable for any illegal/unethical activity stemming from their access point if there is no evidence of other users on the access point.

Users are required to register their device with ITS and configure it properly and securely - improperly configured or interfering devices will result in immediate termination of network service until the problem can be resolved. (Please note that these policies do NOT apply to wireless accessories, such as keyboards and mice.)

Instructions for Personal Wireless Users

Remove or disable your wireless Ethernet card if you do not plan on using it. Leaving it enabled will cause confusion later if it attempts to bypass your wired Ethernet port.

Register your device. Students should contact Student Computer Services x3666 or scshelp@colby.edu to register wireless access points (not cards). Provide your name and jack (wall plate) number. This will help ITS identify and

contact you if we discover problems.

If you wish to use a wireless access point, you must configure it so that it does not interfere with the campus network or other network users. This includes the following:

Disable all DHCP and NAT functionality. Each machine should receive IP addresses only from Colby's DHCP servers. ITS will disconnect any device acting as a DHCP server.

Require authentication for all incoming wireless connections, either by user name/password or MAC address, or preferably both. Use unique passwords – never use default passwords.

Limit the number of connections to the number of computers in your room. By default, access points allow anyone in the area to use your connection, opening large security holes.

Limit broadcast area and signal strength to absolute minimums. This prevents anyone from eavesdropping on you from outside the room.

Enable WEP encryption at the strongest level allowed by the device.

Always use a unique SSID, and disable SSID broadcasting when possible to increase privacy.

If you do not understand these instructions, consult the documentation for your device and the manufacturer's website. If you have doubts about what you are doing, or are concerned for the security of your data, we suggest that you wait until a secure, campus-wide wireless offering is able to guarantee successful operation. Please contact the help desk with any questions, but please realize that ITS does not have support expertise on specific devices and products. Wireless devices are not permitted in academic and administrative buildings.

Individuals intending to use wireless network devices need to be aware of its problems and limitations in order to avoid being disconnected from the network by ITS.

News from the Library

By Toni Katz

New Director

The Library welcomed Clem Guthro as Director of Libraries in July. Clem grew up in Nova Scotia and still maintains strong family ties there. He received a BA in Religious Studies from University of Manitoba, an MA in Christian Theology from Point Loma Nazarene University, an MLS from University of Western Ontario, and is currently in the dissertation stage of an EdD in higher education leadership from Nova Southeastern University. Clem comes to Colby from Macalester College in St. Paul, Minnesota. Clem and his wife Gayle have three children: 10 year old twins, Erinn and Rachel, and a 7 year old son Jacob. Also part of the family is a 3 year old oversized white miniature Schnauzer named Lightning. Besides an obvious interest in libraries, Clem also enjoys cooking, travel, and home improvement, and being close to the ocean.

Clem's vision for the library includes a focus on service, collections, partnerships, innovation, and the library as place. Intending to build on the solid legacy of Suanne Muehlner and a great staff, Clem hopes to emphasize the service provided by the librarians and support staff and their integral role in the educational process. The library's collections, both physical and virtual, will continue to be developed to support Colby's emphasis on academic excellence, diversity, and a global perspective. The presence of the CBB consortium and Maine InfoNet provides a context to build the collections, strengthen and expand our

partnerships, and look for new models of providing information to our key users. Cooperative models also allow for new partnerships to develop between the library, faculty, and other academic units. Since Colby is a residential campus, the library as a physical place plays an important role in research, socialization, and the engagement of ideas and technologies. If Colby is to lead in these areas, then the library as place needs to be part of the vision for the future.

New Library Staff

Alisia Wygant has stepped in as the new administrative secretary in the library following Janey Adams' retirement. In addition, she is serving as stacks supervisor for the coming year. Alisia returns to the Waterville area after spending 4 years attending a certain college in Brunswick, Maine (which tends to get bad reactions from Colby staff and students). She lives out in the country, in Freedom, with five cats and two dogs. When she's not taking her work home—in the form of checking out books that should be shelved—she enjoys music, especially singing, and gardening.

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Besides upgrading many faculty and staff computers, all computers in the Lovejoy 400, Miller 16, and Olin 323 clusters were replaced with newer models. Many upgrades were made in the other departmental labs. Macintosh computers continued to dominate the allocations by about 4 to 1 as a result of the continued faculty focus, and the student cluster machines continue at the same nearly equal proportion (slightly more Windows than Macs) to reflect the continued need for students to have access to Mac applications that faculty are using in many courses.

Active Directory Authentication Replaces DCE

Another area of major effort this summer was completion of the new authentication system (login/account names and passwords) that will replace DCE. This project was begun two years ago and has been a major technical challenge. The new system is built on Active Directory and will soon be used for all secure server resources on campus. First year students were the first to use this system when they created their passwords remotely this summer and did their course selection and other activities requiring authentication. In the next few weeks everyone will be encouraged to go to a web page, requiring authentication using their current DCE password, enter a password for the new system (the same password as before can be used if it passes the strength test), and from then on their authentication for all systems will use this new password.

The authentication project was lead by Dave Cooley and Cathy Langlais with critical participation by Jeff Earickson and Keith McGlauffin, who each had to solve a wide array of system design and technical implementation problems. We plan to turn DCE off at the end of December, completing this major technological transition.

Webmail

One of the major reasons for switching from DCE to Active Directory was to make it easier to add important new resources to the campus network environment. At the top of the list of systems we have wanted to add is Web-based email. This is now ready to use at www.colby.edu/webmail from any computer on campus or elsewhere. We still encourage people to use Eudora on their own computer so the email is downloaded off the central server. However, webmail makes it easy to read and send email from any place. For example, if you are working in a lab and need to take a data file you have created, you can just email it to yourself as an attachment and get it later back in your room. Among the projects remaining on the list (dependent on Active Directory

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implementation) is central storage space for Mac and Windows files so you can open your storage space from whatever computer you are using and save files there. We will try to put that in place later this academic year.

Wiring Upgrade

This summer has seen the conclusion of the three-year project to upgrade data network cable in the academic and administrative buildings and residence halls to meet the requirements for the rest of this decade and beyond. All cable now on campus can support the current standard 10/100 megabit per second Ethernet. It can also support the next level of network electronics, 1000 megabit (1 gigabit) when we begin deploying that in a few years. Furthermore, although the standards are not yet defined, there is a good chance that at least most of our installed cable will be able to support even larger capacities as network electronics improves.

Wireless Networking

Why spend money upgrading the cables when wireless is becoming so common? It is important that we understand the different capabilities and functions of wired vs. wireless networks. Although wireless network bandwidth is improving significantly, it remains well behind wired networks in some critical ways. A wireless connection might be 50 megabits, compared to a 100 megabit wired connection. However, everyone in a room is likely to be sharing that 50 megabits (it is a shared medium). If there are 10 people actively using the network connection, each one has on average 5 megabits of bandwidth (and a range of 0 to 50 megabits). Our wired network connections are switched, not shared, although both wired and wireless hub connections would both share the network backbone, which at Colby is increasingly 1 gigabit. This means that 10 people in a room (a cluster, for example) each connected to a wired port could see 100 megabits in effective bandwidth, 50 times greater than the pattern for a wireless network, assuming there is no contention for bandwidth elsewhere in the network.

We know there is interest in having wireless network access in certain areas at Colby. Our strategy has been to wait, in part because we have not had the staff time to explore the implementation issues but, more importantly, because “being of interest” and “it would be nice” are not sufficient justifications for the expenditure of limited resources. I have heard sales people talk about the value of making it possible for students and faculty to sit out under a tree by Johnson Pond or on the library steps, enjoying the beautiful scenery while accessing academic resources on web (OK, when I see classes meeting regularly on the steps of the library at any time other than September

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and after the middle of April maybe I will buy this argument) and certainly the clear value of students during class being able to take notes and look at the relevant web pages pertaining to the lecture or discussion topic (OK, so who thinks anybody might be primarily working on email, messaging their friends, some of whom may be in class with them, or surfing unrelated web sites?). There are legitimate applications of wireless networking in our environment. Some areas of Miller Library come to mind, although the very low frequency of use of existing wired ports calls into question the need for more network access. There are also many lounges and study areas with no wired network ports where wireless access could be useful.

Peer-to-Peer File Sharing and Copyright Law

This summer I've been watching developments in the battle between the recording industry and file sharers. There is clearly a major difference in views between the copyright owners and the music and movie file sharers who ignore copyright. For the past five years I have regularly sent notices to students making them aware of the laws that govern copyright and the possible legal implications of infringing the rights of companies and individuals who own copyrights. Since last spring the recording industry has become significantly more active in pursuing legal action against those who blatantly violate the law, at significant cost to the individuals accused. Because of the pattern of complaints that Colby has received from the recording and motion picture industries over the past three years, I expect this year to see the College subpoenaed for the names of students who share files in violation of copyright. I don't think there will be much the College can do but notify the student that his or her name is being sent and that they should expect to be the target of a civil suit in federal court.

There are only two ways to avoid this: (1) students as well as all other members of the Colby community decide to obey the law, honor copyright, and stop sharing music and movie files in the way that has become very common place at Colby or (2) the College uses available network technology to block all file sharing, peer-to-peer applications like Kazaa, Gnutella, Morpheus, Limewire, etc. All colleges and universities are facing this challenge and several of our peer institutions (Bates, Holy Cross, Whittier, Wheaton, and Williams Colleges, with others still deliberating) have decided to take the major step of blocking use.

I've prepared an overview of the legal and practical issues – it's on the web at www.colby.edu/its/news/fall03copyright.html. This will be an important issue for all of us as a community to address this year and I would be glad to participate in discussions with any group.

We face some interesting challenges this year and my ITS staff and I are looking forward to working with all of you to help achieve your academic and personal goals. If you have suggestions or ideas, let me know. We are constantly working to make the Colby's IT environment as effective as possible with the available resources. Have a great year!

Ray Phillips