News about information systems throughout MIT

I/S

Volume 17 • Number 3 January / February 2002

ThinkCycle: Reaching Out to Solve Real-World Problems

• Lee Ridgway

The World Wide Web has some powerful attributes. It's a way to share information across the globe, easily and openly, at very little cost. It can also enable collaboration among far-flung people who might otherwise never meet or know of each other.

These attributes are behind an idea put forth in March 2000 by a group of graduate students in the Media Lab. The initial group included Ravi Pappu, Saul Griffith, Nitin Sawhney, Yael Maguire, Wendy Plesniak, and Ben Vigoda. Their idea, simply stated, was to create a database, accessible over the Web, that would enable "open source" problem solving among university students and communities in the developing world.

They envisioned the database and the Web combining into a system that documents submitted problems and the evolving design solutions to those problems. The database would serve as the repository for all the iterative design concepts, technical notes, working files, and images around a problem and its solution. This repository would be searchable, cross-referenced, free, and open to the public.

Out of this concept grew ThinkCycle. Built on open source tools such as Linux and the ArsDigita Community System, ThinkCycle resides at

`http://www.thinkcycle.org/`

Its name comes from the notion of harnessing the creative minds, or "think cycles," of people everywhere to work on global design challenges.

With over a year of activity behind them, the MIT students who run this academic, nonprofit initiative are starting to realize some of their ideas.

Motivations

Several motivations are behind the ThinkCycle concept. One has to do with changing the way engineering design is taught in schools. In traditional design courses, students are given projects for problems that have already been solved – in effect, reinventing the wheel. ThinkCycle focuses on real-world problems and moves beyond the local classroom model, involving students and faculty at MIT and other schools in industrialized and developing countries.

Another motivation behind ThinkCycle is to work on problems in communities not being well served by new technologies. To get at these problems, ThinkCycle asks non-governmental organizations (NGOs) and other stakeholders related to underserved communities to submit worthwhile challenges.

How It Works

The ThinkCycle process can be summed up as follows:

1. An NGO or other stakeholder submits a problem to ThinkCycle. The problem is given a peer review by domain experts and made accessible in the ThinkCycle database.

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ThinkCycle

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2. Design faculty in a participating school can select problems for a design course and present these to the students in the course.
3. The students, working in teams, investigate the state of the art around technology related to the challenge, establish design constraints, brainstorm design concepts, then design and manufacture prototypes.
4. During the design and prototyping, experts in the domain of the problem review the work of the students and provide advice as well as resources.
5. As with any design course, at the end students give a final report and project presentation, which may include recommendations for future work.

Within the ThinkCycle database, the challenges are organized into topics; one topic may include several related challenges. These topics serve as the file cabinet and shared "ThinkSpace" for those working on the challenges and for others interested in their progress. Through an online discussion board, shared file space, and notes, a detailed record is built up which is open to all.

Those who pose the challenges post notes with resources, links, and relevant images. Design teams use the system to get postings, as well as to publish work in progress. Other participants can review the ongoing design and can even post their own contributions. There is no formal moderation mechanism in place, although the ThinkCycle coordinators who create the topics serve as initial editors to set up the domain and make suggestions to contributors as needed.

Design That Matters

The ThinkCycle concept was put to the test last spring in an independent study, special projects course in the Media Lab, Design that Matters. About five projects were completed.

One of the challenges undertaken dealt with cholera treatment devices. In an outbreak of cholera, medical specialists usually train local community members to implement the IV treatment needed to treat severe cases. The design challenge was to develop a compact kit for the medical teams that could be used to clearly and quickly instruct the local people in the use of IV drip-set equipment. Part of the challenge was that the trainees may be illiterate, and that the IV treatment involved calibrating equipment settings.

Working with a prototype ThinkCycle database, the interdisciplinary design team used the system as envisioned by its creators. Starting with nine design concepts, the team eventually developed two prototypes and a third detailed design description which showed the most potential for addressing the challenge of rapid IV deployment. Documents were shared through the ThinkCycle file space and archived in the database, including discussions with two cholera treatment specialists at MGH who consulted with the team and gave critical feedback. A peer-reviewed paper concluded the work for the course. This trial run was proof enough of the ThinkCycle concept and system, which encouraged the ThinkCycle team to expand its horizons.

This spring, Design that Matters will be offered again. It will be run in conjunction with a collaborative network of design courses at universities in Kenya, Brazil, Costa Rica, Portugal, and India. Instructors for the course include Timothy Prestero and Leo Burd, joined by original ThinkCycle team members Griffith, Sawhney, Maguire, and Vigoda. The faculty supervisor for the project is Professor Mitchel Resnick.

TSM's Automated Tape Library Provides 24x7 File Restores

It's the middle of a holiday weekend and you need to obtain a computer file that you backed up on the TSM server. No problem. The file restore service is now available 24 hours a day, year round, and the restores are faster than ever.

Automation Improves TSM

IS has offered its TSM backup service for several years. However, until the Automated Tape Library (ATL) was installed last October, the times when you could restore a file were limited. An operations person had to mount a tape containing the requested data.

The ATL consists of

- a bank of tape drives
- a collection of tape cartridges
- a robotic mechanism to retrieve and load the tapes into the drives.

Tape storage slots line the inner sides of the ATL's tunnel-like structure. The ATL can shelve tapes that an operator inserts into a special receptacle and can also inventory its entire collection.

The robotic mechanism includes a camera and two grippers. It is directed by TSM software and software microcoded into the mechanism itself.

Gearing up for Automation

Located in Building W91's Data Center, the ATL is connected to the IBM mainframe. Two IS teams – VM System Services and Data Center Operations Services – set up, tested, and made the ATL operational over a period of about six months.

Learn More

For more background on the ATL, including photographs of the library and robotic mechanism, go to

`http://mitvma.mit.edu/~vm-sst/ibm3494/`

For more information about the TSM backup service, see

`http://web.mit.edu/is/help/tsm/`

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i/s is published six times a year. MIT faculty and staff receive copies through campus mail; *i/s* is also available in lobbies around campus. Individuals at MIT may subscribe by contacting the managing editor.

Send comments or subscription requests to:
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i/s is also published online at
`http://web.mit.edu/is/isnews/`

A companion Web site, *i/s NewsLink*, offers frequent news updates. It's located at
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Adobe Acrobat 5 Leaps Ahead in Flexibility

• Robyn Fizz

Adobe Acrobat has been a staple in publishing for many years. This software lets you convert electronic documents into the compact Portable Document Format (PDF), a standard that preserves the look and feel of the original documents across platforms. Fonts, images, colors, and layout are all preserved.

You can publish PDF files in print or on the Web, or send them as e-mail attachments. Anyone who has the free Acrobat Reader can view and print the files, no matter what software is on their machine. The Reader also lets you fill in and submit Adobe PDF forms online. (See the box below for information about IS support for Acrobat Reader.)

Acrobat, which lets you create and enhance PDF files, is commercial software. Adobe released Acrobat 5 for Windows and Macintosh last year. The current version is 5.0.5. This update addresses known issues in Acrobat 5.0 and provides support for Windows XP and Mac OS X, along with better integration with Microsoft Office.

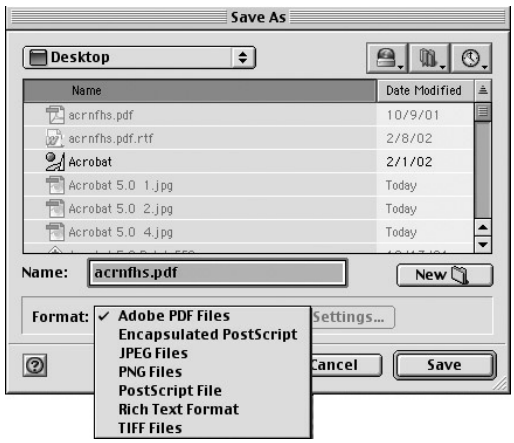
New features in Acrobat 5 improve the ability to repurpose content and review documents. Security and accessibility have also been enhanced.

Repurposing Content

Acrobat 5 offers several ways to extract text and graphics from PDF files. You can use the Save As command to save all text in a PDF file to Rich Text Format (RTF), for use in word processing and page layout programs. The same command also lets you save each page in a PDF file to an image format, such as JPEG, PNG, or TIFF. A settings option gives you control over compression quality, resolution, and the like.

The Export command lets you extract all graphics from a PDF file; each graphic is saved to a separate file. Again, you can choose the JPEG, PNG, or TIFF format, using the settings option for more control.

On the flip side – turning documents into PDF files – Acrobat 5 lets you convert a range of file types to PDF using the Open as Adobe PDF command. You can either create a new PDF file or add the document to an existing PDF file.



The Save As command lets you convert PDF files to other common formats.

The Web Capture command lets you convert Web pages into PDF files with all links intact.

Review Documents Online

With Acrobat 5, multiple users can view and add comments to the same PDF document from within their Web browsers. Reviewers can add their comments right at the location of requested changes. These comments can be in the form of electronic sticky notes, text, audio, or attached files.

Added Security

Acrobat 5 provides enhanced controls so that you can securely share sensitive documents online. The program now supports 128-bit encryption and a flexible digital signature architecture.

Acrobat 5 lets you restrict printing or allow printing only at low resolution, among other options.

Finally, flexible security settings let you determine which actions viewers of a PDF file can take. You can prevent others from changing a document, for example, yet still let them add comments or digitally sign the document.

Accessibility

Acrobat 5 offers some improvements for people with disabilities. The program supports high-contrast settings for those with low-vision impairments. In addition, authors can create documents that are compatible with third-party, Windows-based screen readers.

More Information

For in-depth information about Adobe Acrobat 5, start at

`http://www.adobe.com/products/acrobat/`

As a user of the program, go under the Help menu to find extensive documentation about Acrobat features.

IS Support for Acrobat Reader

Information Systems supports the latest version of the popular PDF viewer, Adobe Acrobat Reader 5.0.5. Acrobat Reader can be used as a stand-alone product or with a Web browser on Windows or Macintosh systems.

If you are using an older version of Acrobat Reader and it is working for you, you don't need to upgrade to Reader 5.0.5 unless you want access to its new features. These include:

- Support for screen readers, offering accessibility to the visually impaired (Windows only)
- Improved access to Web-hosted applications and online services
- Ability to save copies of files downloaded in Web browsers
- Better display of text on LCD screens using Adobe CoolType technology

You can download Acrobat Reader from

`http://web.mit.edu/software/`

For installation instructions, see

`http://web.mit.edu/is/help/acrobat/`

Getting Help

For help with Acrobat Reader, send e-mail to <computing-help@mit.edu> or call x3-1101 (Macintosh) or x3-1102 (Windows). IS does not support the commercial product, Adobe Acrobat; if you need help with Acrobat, the Computer Help Desk will make a reasonable effort to provide assistance.

Changes Coming to ECAT, MIT's Electronic Catalog

• Lee Ridgway and Lorraine Rappaport

Over the next few months, those who do purchasing for MIT through ECAT will see some changes.

Computer Equipment

Look for the following vendor changes in the area of computer hardware, software, and other equipment.

- MIT is terminating its contract with NECX as of March 31, 2002. NECX's customized MIT catalog will be available for Institute and personal purchases until the cutoff date. Because orders will be accepted through March 31, there will be a transition time for deliveries, back orders, invoices, credits, and returns.
- PC Connection and Dell are being added to the ECAT vendor list to replace NECX for MIT purchases. Special pricing for MIT purchases will be offered by both vendors.
- PC Connection offers a much larger catalog than NECX. It will be the place to go for Apple products, including MIT-recommended systems, other (non-Dell) computer hardware, peripherals, accessories, and software. You will also be able to make personal purchases through PC Connection at MIT's special prices.
- MIT purchases of Dell Windows systems will be done through the Dell ECAT catalog. These systems may be custom-configured for options such as memory, hard drive, and monitor. For personal purchases of Dell equipment, go to

  `http://www.dell.com/`

  (MIT discounts do not apply to personal purchases.)

Office Furniture

MIT Procurement is working with Creative Office Pavilion to make it easier to select, price, and purchase Herman Miller office furniture, such as chairs, desks, tables, cabinets, and cubicle dividers. Creative Office Pavilion is preparing a Web catalog for MIT that will feature Institute-recommended products. The site will help MIT purchasers select and configure Herman Miller products, and submit the order to Creative Office Pavilion for a quote; the quote will then be forwarded to Procurement for approval.

Hardware (Nuts 'n' Bolts)

Grainger has been selected as the vendor partner for maintenance, repair, and operations supplies. Their comprehensive catalog features equipment, tools, parts, and other materials related to facilities management and upkeep. Grainger is upgrading their catalog with improved navigation, additional search and tracking options, and easier integration with customer systems, such as ECAT.

Delivery Service

MIT's designated shipping vendor is DHL. Offices can now prepare, track, request pickups, and handle billing for their outgoing shipments through the Web Shipping option on the DHL Web site. For electronic billing, it is crucial that the cost object be entered in the shipper's reference field.

Registration is required to use Web Shipping for MIT purposes. For details, call John Goddard in the Procurement Office at x3-8383.

More Vendor Information

Once these new vendors are in place and available for general MIT use, you will be able to get more information about them and access their catalogs from the main ECAT page at

`http://web.mit.edu/ecat/`

Behind the Scenes

With these new partners, MIT is upgrading its ECAT infrastructure to support transactions under the eXtensible Markup Language (XML). This is in addition to the Open Buying on the Internet (OBI) and Electronic Data Interchange (EDI) standards that MIT currently supports. ECAT uses these e-commerce standards in three ways:

- To transmit the contents of the shopping basket at the vendor's Web site to an MIT server, which then populates an SAPweb requisition;
- To send electronic purchase orders from SAP to the vendors;
- To receive electronic invoices from the vendors to post in SAP.

As more companies adopt the XML standard, MIT will have greater flexibility to add new vendor partners. All changes in back-end processing should be invisible to ECAT users.

This column presents announcements about IS-supported software. For more information about recent releases, see `http://web.mit.edu/swrt/`

Do You Have a Current Version of Kerberos for Windows?

What version of Kerberos for Windows (KfW) do you have on your PC? You can find out by going to the Start menu and then selecting Programs→Kerberos Utilities→Leash32. Under Help, select About Leash32 at the bottom of the drop-down menu. Next to the icon of the three-headed dog, you will see "Leash32 Version _._." If you have version 2.0 or earlier, you should install a new version before June 30, 2002, when IS will discontinue support for KfW 2.0 (aka MinK-10-18-99).

You will also want a newer KfW version so that you can use some long-awaited software, including KLP (Kerberized Printing) and FileZilla (Kerberized FTP), due for release this spring.

The latest version, KfW 2.1.1, is available from

`http://web.mit.edu/software/`

KfW 2.1 is also an acceptable version as explained below.

If you need help removing an old version or installing the current version of KfW, contact the Computing Help Desk at <pc-help@mit.edu> or x3-1102.

Windows XP and Kerberos for Windows

Microsoft's new Windows XP operating system did not work with Kerberos for Windows (KfW) 2.1. MIT developers have fixed the problem and released KfW 2.1.1, which is available from

`http://web.mit.edu/software/`

The only change between KfW 2.1 and KfW 2.1.1 is this fix, so if you have KfW 2.1 installed on Windows 2000 or an earlier operating system, you do not need to upgrade to KfW 2.1.1.

Software Downloads

The redesigned Software Download site at

`http://web.mit.edu/software/`

has a new layout and more information, including the file size of the download and where to go for help. You need an MIT personal certificate to download software from this site.

Apple Computer's New iMac Makes a Splash

Apple recently introduced some notable products, including the eye-catching G4 iMac system.

This dome-shaped computer is architecturally reminiscent of the PowerMac G4 Cube, with an equally interesting component arrangement. The chassis houses a circular logic board, the first of its kind, which sits at the base of the system. It also houses the power supply. The fan that cools the processor and graphics accelerator is no louder than the hard drive, rated at about 25 decibels. This system weighs only 21 pounds including the monitor.

The new iMac boasts several advantages over older iMacs. This is the first iMac unit with a G4 processor, available in speeds of 700 or 800MHz. Also new to the family is the NVIDIA GeForce2 MX graphics accelerator with 32MB of dedicated memory. It powers the 15" flat-panel LCD screen that is attached to the base by a hinged stainless steel arm.

The new iMac is loaded with expansion and input/output options, including a VGA video output (functional with the use of an adapter), two FireWire ports, and five USB ports, two of which are on the keyboard. The iMac is Airport-ready and includes an integrated 56k modem and 10/100 Base-T Ethernet. It has speaker and headphone outputs and a built-in microphone.

Apple makes three iMac models. The high-end system features the DVD-R/CD-RW SuperDrive, along with 256MB of RAM and a 60GB hard drive. The mid-range iMac has a Combo drive (DVD-ROM/CD-RW), 256MB of RAM, and a 40GB hard drive. The base model has a CD-RW drive, 128MB of RAM, and a 40GB hard drive. The high- and mid-range models sport Apple Pro speakers, with cutting-edge audio technology from Harmon/Kardon.

Prices range from $1199 to $1699.

Revamped iBook

Apple has added a high-end model to its iBook line. It features a 14.1" screen, 600MHz G3 processor, 256MB of RAM, Combo drive, and 20GB hard drive. The system weighs six pounds, and the improved battery is rated at six hours.

The new iBook is priced at $1699.

Caveats

The iMac has a memory capacity of 1GB. It has two memory slots, only one of which is user accessible. When configuring the base or mid-range model, 512MB as one DIMM is not an option. This prevents purchasers of these two models from exceeding 768MB without assistance from an Apple service technician. The iBook has 128MB built in and one slot; its maximum RAM is 640MB.

By default, the new iMacs and iBook boot into Mac OS X. To run Mac OS 9 instead, see Tech Tips on page 6 for instructions.

For More Information

If you have questions about configuring or buying these systems, contact the MIT Computer Connection at x3-7686 or <mcc@mit.edu>.

Student Technology Consultants Can Do the Job

• Joanne Straggas

Do you ever need help on a short-term technical job such as updating a Web page, writing a macro for a repetitive task, upgrading your department's version of Eudora, or installing more memory on your computers? The Student Technology Consultants (STC) may be the resource you are looking for.

This student-run agency, sponsored by the Edgerton Center, places student consultants in short-term positions offered by MIT faculty and staff. STC consultants are trained to give professional service, focusing on the needs of the client. The STC's mission is to build faculty-student-staff relationships in a professional atmosphere while providing technical products and services.

The cost is $15 per hour plus 10% to cover operating costs.

Suite of Offerings

While the group will try to match a student consultant with whatever your technical needs may be, STC also offers two services that are well-defined and in demand across the Institute:

- *Palm Pilot Installs.* STC consultants can install useful Palm applications and conduits for you. The basic suite contains conduits for Eudora and MeetingMaker; AvantGO (browser); and SecureMemo (encrypted memo pad).
- *Basic Network Package.* This includes installation of Netscape, Eudora, Kerberos, and Certificates, along with related training.

In addition, STC consultants can install or upgrade hardware and software, including MIT-supported software such as VirusScan, Microsoft Office (Word, Excel, PowerPoint), and Dreamweaver. They can also install printers, scanners, drives, and memory upgrades.

Hiring an STC

Anyone who can authorize payment from an MIT account can submit a job to the STC. Typically, a client is an MIT faculty or staff member. Work must be done on campus, not in private homes.

To place your first job request, follow these steps.

1. Go to `http://stc.mit.edu/`
2. Under Clients, click the link New? Sign up now!
3. Review the requirements on the registration form.
4. Click the link Register as client (requires certificates). After you fill out and submit the form, you will be prompted to login. You'll then see your own dynamically generated client account page.
5. Click the Submit Job link and fill out the form, then click the Submit Job! button.

You'll be notified by e-mail in a week or less when your request has been matched with a consultant. The consultant will then get in touch with you.

This column presents answers to frequently asked technology questions. For more Q&As, check the IS Stock Answers database at

`http://hdstock.mit.edu/stockanswers/`

At this time, Information Systems recommends that Macintosh users, including those purchasing new machines, continue to use Mac OS 9.x as their primary operating system. IS expects that Mac OS 9.x will remain a viable operating system for the foreseeable future. There are several reasons for this recommendation to stick with Mac OS 9.x, among them that:

- MIT's centralized TSM backup service does not work with Mac OS X.
- Not all supported applications have been thoroughly tested with Mac OS X. (For details about testing, see `http://web.mit.edu/swrt/macosx/matrix.html`)

Although Mac OS 9.x remains the supported operating system at this time, IS is continuing to evaluate what it will take to support Mac OS X at MIT in the future and will provide monthly updates on progress in that area. For the current update, see the box below.

The two Q&As that follow address concerns of Macintosh users who have both Mac OS 9 and Mac OS X on their machines.

Q I just bought a new Macintosh and when I turn it on it says that it's running Mac OS X. This looks nothing like the Mac OS I'm used to. How do I get back the old look and feel and the old functionality?

A Apple's new operating system, Mac OS X (the Roman numeral X is pronounced "ten") looks and works much differently than Mac OS 9. Currently, all new Macintoshes ship with two operating systems, Mac OS X and Mac OS 9.2.2. Mac OS X starts by default. Almost all of your existing applications will run in Mac OS X's Classic environment. Classic is Apple's term for Mac OS 9 when it's running within Mac OS X. You can also boot directly into the Mac OS 9.2.2 and bypass Mac OS X altogether, if you don't wish to use the new operating system at this time. There are two ways to do this.

First Method

1. Hold down the Option key and restart your computer.

   Result: After the restart, you will see a blue screen with icons representing every bootable operating system loaded on your Macintosh. The blue X represents Mac OS X. The yellow 9 represents Mac OS 9.
2. Click the yellow 9 icon and then click the arrow button (or just press the Return key).

This method may not work for all Macintoshes, depending on the hardware configuration and disk partitioning. If it doesn't work, use the second method.

Second Method

If you have already stepped through the introduction application to set up Mac OS X, you can select your startup disk from the System Preferences application.

1. Select System Preferences from under the Apple menu icon in the upper left hand corner of the screen.
2. Click the Startup Disk icon, listed under the System category.
3. Select the operating system you wish to use and click the Restart key in the lower corner.

Once you have selected the operating system, it will continue to load until you manually select the other one.

Q I'm using a Macintosh with both Mac OS 9 and Mac OS X loaded. Which files and folders do I have to keep to ensure both systems will run correctly?

A Depending on whether you have booted into Mac OS 9 or Mac OS X, the file structure will look different. Mac OS X hides a lot of files from the user that Mac OS 9 does not.

When using Mac OS X, you need these Mac OS 9 folders:

- Applications (Mac OS 9)
- Documents (*Depending on where you store your data, this folder may not be essential.)*
- System Folder

When using Mac OS 9, you need these Mac OS X files and folders:

- Applications
- automount
- Library
- System Folder
- Users
- mach
- mach_kernel
- mach.sym

Warning: Mac OS X does not allow the user to delete essential files or folders (like the System Folder) from the computer, whereas Mac OS 9 will let you delete *any* file or folder that is not in use.

Support Status for Mac OS X at MIT: An Update

Information Systems and its IT colleagues are committed to Mac OS X and intend to roll out support in a thoughtful, phased approach. Early support will likely be for network connectivity, printing, and working in the Classic environment in Mac OS X. Later phases of support will encompass an integrated suite of applications and functionality. We are working to determine what the minimum combination of applications should be. A support announcement will need to consider vendor support statements, dependent application compatibility issues, local support for the desktop, infrastructure requirements, and support for any of the enterprise-wide applications.

IS support for Mac OS X at this time is limited to issuing hostnames and IP addresses for Mac OS X machines, and providing assistance with network connectivity for students living in residence halls.

If you need to use your computer for any MIT administrative tasks or rely on support from IS for the applications you use, we recommend that you do not transition to Mac OS X at this time.

For updates on the support status for Mac OS X, see

`http://web.mit.edu/is/help/macos/macosx/`

Reusing or Recycling Older Computer Equipment

• Janet Snover

The material in this article has been "recycled" from two articles in Tech Talk (April 12, 2000 and June 6, 2001).

Ever wonder about the proper way to get rid of MIT computer equipment that you no longer need? MIT has established programs for reuse or recycling of useable items, or disposal when appropriate.

The place to start is with MIT's property disposal officer, Michael McCarthy, whom you can reach at x3-2779 or <mmccarth@mit.edu>. Let him know what items you have, their MIT bar code numbers, and where they are located. For reuse, the equipment should be in good working condition.

McCarthy knows what hardware is popular at MIT, and maintains a "specific needs file" of items that departments, labs, and centers would like to acquire. When unwanted items aren't on this wish list, McCarthy sends e-mail to the appropriate "reuse" list to alert interested community members about equipment they might be able to use in their offices. The e-mail lists under the "reuse" umbrella can also be used by any member of the community; if you want to see what others are offering, subscribe to the list at <reuse-request@mit.edu>. For full details on the reuse lists, see

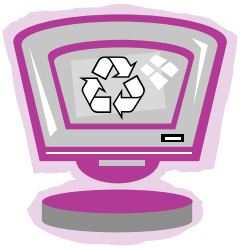
`http://web.mit.edu/save/www/`

If computer equipment owned by MIT isn't needed by anyone at the Institute, it is sold; the procedure depends on how much it is worth. More expensive items are offered for sale on a sealed-bid basis; McCarthy informs the MIT reuse-sell list as well as appropriate dealers about what's available. Older, less expensive items are sold on a cash basis. (Massachusetts sales tax is collected from buyers.) In either case, the MIT department that owned the equipment receives 90 percent of the selling price and the other 10 percent goes to the Property Office as an administrative fee.

Excess property that was purchased through a government contract or grant should be screened to determine whether it meets the needs of other contracts. McCarthy works with MIT's government property administrator, John Erkkila, to ensure that any equipment bought with government funds is handled properly.

Another option for getting rid of older equipment is to move it to the Equipment Exchange in WW15 at 350 Brookline Street. The Exchange offers items for sale and interdepartmental transfer. There is no charge for items claimed by other MIT departments but, coming or going, departments must arrange for moving and transportation of the equipment. For more information about the Equipment Exchange, including hours, see

`http://web.mit.edu/property/www/ww15.htm`



Disposal of Monitors

A Massachusetts law mandates that cathode ray tubes (CRTs), such as those in computer monitors and TV sets, must be reused or recycled rather than going into landfills or incinerators. This restriction keeps the toxic metals that the devices contain from leaching from landfills into ground water or being released into the air when trash is burned. To comply with the law, MIT hires an outside contractor to pick up and recycle old monitors.

The lead in the old monitors is reused, other metals are recycled, and the plastic housing is shredded and made into a special material for filling pot holes. On average, MIT disposes of about 50 old monitors per month.

To partially cover the cost of compliance, MIT offices, labs, and centers need to submit a requisition for disposal of a monitor. The cost is $15 if the monitor is brought to the loading dock in Buildings 3 or E19 from 9am to 4pm on weekdays, and $32 if an area prefers to have the Department of Facilities pick up the monitor. There is no additional charge for disposing of a computer's central processing unit or keyboard. To arrange for pickup, call x3-6360. **Note:** *Please act responsibly and don't abandon old monitors in hallways.*

To discard equipment with a Property Office sticker, you must first get the sticker deactivated. To do this, contact Michael McCarthy at x3-2779 or <mmccarth@mit.edu>.

You can direct questions about the disposal policy to Austin Petzke, manager of Facilities' Building and Grounds Services, at <apetzke@mit.edu> or to Kevin Healy, recycling coordinator in Facilities, at <khealy@mit.edu>.

IS Training Services Adds New Courses for Spring

• Bronwen Heuer

Looking ahead to spring, IS Training has added half-day courses on Word 2002 and Mac OS X to its curriculum and is reprising a newer course on Linux fundamentals. The usual roster of hands-on courses and Quick Starts will also be offered.

Linux Fundamentals

April 8 & 9, 8:30am to 4:30pm

This two-day course focuses on effective use of the Linux operating system. Learn how to manage files and directories, work with text editors, use a range of Linux commands, and take advantage of the Linux shell. The course also covers I/O redirection, filters and their applications, and customizing your login environment.

Transitioning to Mac OS X

May 21, 9am to noon

Mac OS X represents a major change in the Macintosh platform architecture. This course introduces the new Finder, Aqua interface, and desktop features such as the Dock, traffic light buttons, and a new way to view files and folders. See how a multi-user system alters the location of your files and folders. Find out how to use a dual boot system where Mac OS 9 and Mac OS X reside on the same machine. This includes learning the implications of launching programs in the Classic environment that aren't native to Mac OS X.

Transitioning to Word 2002

June 18, 9am to noon

Explore the new features of Word 2002 for Windows. This course reviews the different task panes and shows how Smart Tags have been implemented. It covers the new book format for printing multiple pages per sheet and how to make non-contiguous selections. Participants also have the opportunity to experiment with other new features in the areas of graphics and document collaboration.

Preparing for Spring

You can find out the schedule for spring courses and Quick Starts, including locations and fees, in the quarterly flier that IS will send out in March via campus mail. To read the full course descriptions, visit the IS Training Web site at

`http://web.mit.edu/is/training/`

Getting Help

If you don't know where to get help for your computer, network, or telephone problems, dial one of the help lines listed to the right.

If you prefer to use e-mail, you can send your questions to the corresponding e-mail addresses on the far right. (When logged into Athena, you can also use the `olc` command to send questions to Athena's online consultants.)

For a complete list of services offered by Information Systems, see `http://web.mit.edu/is/services/`

For help with...	Dial...	Or send a message to...
Administrative applications	2-1177	business-help@mit.edu
Athena Computing Environment	3-4435	olc@mit.edu
Computer and printer repairs	3-0815	hardserv@mit.edu
Computer pre-sales consulting	3-7686	mcc@mit.edu
Disabilities and computing	3-7808	atic@mit.edu
Macintosh computers (including network problems)	3-1101	mac-help@mit.edu
PC computers (including network problems)	3-1102	pc-help@mit.edu
Telephone repairs	3-4357	5help@mit.edu
UNIX/VMS (by subscription)	3-1103	unix-vms-help@mit.edu
Voice mail	3-3677	vmail@mit.edu

Surf Sites: Ways to Collaborate

ThinkCycle is one example of a Web site that encourages collaboration to solve problems (see lead article). Other sites promote open source software and hardware, or work to build community knowledge networks. Still other Web sites try to solve computationally intensive problems by using spare processor cycles of thousands of computers, volunteered by those eager to contribute their small share.

To get a sense of how collaboration works on the Web, visit the sites listed to the right.

Development Gateway
`http://www.developmentgateway.org/`

Distributed Computing
`http://www.distributed.net/`

Engineers without Borders
`http://ewob.colorado.edu/`

Honey Bee Network
`http://www.sristi.org/honeybee.html`

Silver Stringers
`http://stringers.media.mit.edu/`

Simputer
`http://www.simputer.org/`

SourceForge
`http://sourceforge.net/`

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