information services and technology

IS&t

News about Information Services and technology throughout MIT

Inside! Schedules of Hands-on Training Courses and Free Computer Events

On IT Energy at MIT: A Conversation with Laxmi Rao

• Robyn Fizz

On March 1, Laxmi Rao became MIT's first Information Technology (IT) Energy Coordinator, reporting to the Vice President for Information Services and Technology. She spoke recently with *is&t* about her role and strategies for making computing on campus more efficient. Here are highlights from that conversation.

is&t: **You are the first IT Energy Coordinator at MIT. What do you see as your role and what do you bring to it?**

Rao: I'm very excited about the opportunity to help lead, plan, and coordinate activities in the area of IT energy use across the Institute. My focus will be on understanding the IT energy footprint on campus, and finding ways to reduce that footprint.

Working on these types of projects has always energized me. I enjoy doing engineering calculations as much as getting on my knees to install solar panels on a roof. I've had the opportunity to work with MIT faculty and staff and have particularly enjoyed working with UROP students doing research on campus energy use, and with students from organizations such as Students for a Vital Earth (SAVE), Students for Global Sustainability, and the MIT Energy Club.

I hope that my experience, understanding of the MIT campus, and a determination to "walk the talk" will help us all make a difference.

is&t: **How does your position align with MIT's Energy Initiative?**

Rao: The energy challenge that faces the world is enormous. The gap between supply and demand keeps growing. Last September, President Hockfield announced the MIT Energy Initiative, to advance the recommendations of the Energy Research Council. This initiative, led by Professors Ernie Moniz and Bob Armstrong, will focus on three areas: research, education, and the campus.

MIT is very good at defining problems and even better at providing innovative solutions. I think an "all-hands-on-deck" approach is called for. In the short term we need to reduce waste and inefficiency. For the long term, we need to explore a variety of sustainable supply options – a rich area for research. Another key area is MIT's curriculum: how do we teach the leaders of tomorrow about energy issues?

As part of its energy initiative, MIT has created a Campus Walk the Talk Task Force, led by Professor Leon Glicksman and Executive Vice President Theresa Stone. As IS&T's representative on this task force, I hope to support the work of faculty, students, and staff as they engage in activities to reduce the IT energy footprint.

I also want to collaborate with members of IT Partners and IT Leaders, who are on the front lines of computing on campus.

There's a need to approach solutions to the energy challenge from a variety of angles. It's going to take a whole village to address the global energy problem, and I hope the village of MIT leads the way.

is&t: **How much energy do computers on campus use? Are newer computers more efficient?**

Rao: There are over 20,000 computers in our networked environment on campus. IS&T needs to get a good estimate of this inventory, of the diversity of computers and monitors. We can then identify appropriate measures to reduce energy use. There's an opportunity for significant energy savings just by increasing the use of sleep mode for monitors when they're not being used.

Some equipment today uses less energy than equipment from a decade ago. One example is the LCD monitor, which uses less than half the power of a CRT monitor. Laptops also use less

power than desktops. Some of the credit goes to the EPA's now-familiar Energy Star program. There is still room for improvement, though: power supplies, for example, could be more efficient.

is&t: **Computers also have a major environmental impact as e-waste. Is MIT addressing this issue?**

Rao: The Department of Facilities has had a long-standing program for recycling computers and monitors for a fee. A goal of the IT Energy Initiative will be to work with computer vendors – such as Apple, Dell, and HP – to integrate the recycling of e-waste into the normal life cycle for computer renewal. These vendors have asset recovery programs, which give customers the option of safely reselling or recycling used computers.

IS&T will be looking into these options from vendors, initially for machines in the Administrative Desktop Renewal Program managed by the DITR group; equipment in the public computing clusters for students; and its own staff computers.

Down the road, perhaps in partnership with MIT Procurement, there's a potential to scale these efforts to the campus as a whole.

is&t: **What can IS&T do in terms of its IT operations?**

Rao: IS&T – with help from Professors Les Norford and Leon Glicksman of the Building Technology program, the Department of Facilities, and some MIT students – will perform an energy audit of one of its buildings, N42. The objective is to measure energy use from building operations – computing, lighting, heating and cooling – and identify areas for improvement. Takeaway lessons will be applied to other office buildings on campus.

is&t: **How can members of the MIT community make a difference?**

Rao: There's a great opportunity for everyone in the community to participate. As individuals we can each make a difference, and collectively we can make a huge difference.

IS&T is developing energy-saving guidelines for computing at

`web.mit.edu/ist/services/it-energy`

This site will be updated regularly, so spread the word! And be supportive of students, faculty, and others who are engaged in finding solutions.

I welcome ideas from the community for reducing IT energy use on campus; send them to <it-energy@mit.edu>. ⊘

MIT Celebrates Earth Week 2007

Earth Day has been observed in the U.S. since April 1970, and is now celebrated around the globe. At MIT, several departments and campus groups have been involved in planning not just Earth Day, but MIT Earth Week 2007, from April 21 to 27. Highlights of the week will be EcoExpo, a showcase of student research around sustainability on April 25 at 5 pm, and the Earth Day Fair on April 26, from 10 am to 3 pm. Both will take place in the Stata Center.

The Earth Day Fair will feature various types of entertainment, free food, and information tables. Bring your Technocycle (old media, handhelds, peripherals, toner and inkjet cartridges) for an MIT-wide recycling drive.

To find out about activities planned throughout the week, go to

`web.mit.edu/earthday`

To learn more about environmental events on campus throughout the year, see the Sustainability@MIT page at

`sustainability.mit.edu`

Check Out the IT Energy Table

While at the Earth Day Fair in the Stata Center, stop by the IT Energy table. You can view a demonstration of energy use by computers and monitors, and also introduce yourself to MIT's new IT Energy Coordinator, Laxmi Rao. She is eager to exchange information on how to reduce the IT energy footprint at MIT. Feel free to bring your ideas for "walking the talk" on campus, including insights gleaned from courses and research. You can also send your suggestions to the new mailing list at <it-energy@mit.edu>.

As part of the IT Energy Initiative, IS&T is developing a web page of tips and best practices at

`web.mit.edu/ist/services/it-energy`

The *is&t* newsletter will also publish a new column, Computer Currents, starting with the next issue. ⊘

Microsoft Office 2007 Features "Blue Ribbon" Enhancements

• Esther Yanow, Alison Bell, and Robyn Fizz

Sometimes a software release represents a radical rethinking; sometimes the changes are incremental. Microsoft's Office 2007 Professional strides boldly into new territory. The latest version of the Office productivity suite for Windows – including Word, Excel, PowerPoint, and Outlook – has a fresh user interface, powerful design tools, and new file formats. Most users will appreciate the improved workflow, spiffier documents, and smaller files, but won't relish the steep learning curve.

Office 2007 is available for both Windows XP and Vista. IS&T continues to support Office 2003 and recommends that you wait for the go-ahead from your local IT support provider before installing Office 2007.

Fluent Interface

The goal of Office 2007's Fluent Interface is to make the user experience more intuitive. Toolbars and menus have been replaced by a tabbed Ribbon that groups commands by function. Some tabs, such as Home, always appear in the Ribbon; others appear contextually (e.g., the Picture Tools tab appears after you select a graphic). The Microsoft Office Button, in the Ribbon's upper left corner, replaces the File Menu. Keyboard shortcuts have not changed.

By Design

For a consistent, professional look across documents and applications, Office 2007 offers Document Themes, Style Galleries, SmartArt diagrams, and Chart Tools:

- Themes let you apply selected fonts, colors, and effects with a single click.
- Style Galleries (Quick Styles in Word; Background Styles in PowerPoint; Cell Styles in Excel) let you apply formatting characteristics in a flash.
- SmartArt diagrams offer over 80 layouts for creating graphics such as organization charts and time lines.
- Chart Tools let you customize the layout of data with enhancements such as 3D effects.

Another design plus in Office 2007 is Live Preview, which lets you see how changes look before you apply them.
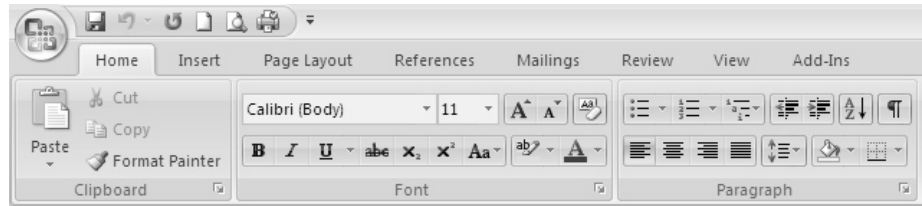
Office 2007 features a tabbed Ribbon to access commands that are grouped by function.

File Formats and Compatibility

Office 2007 has new file extensions based on Extensible Markup Language (XML). Word files are now saved as .docx, Excel files as .xlsx, and PowerPoint files as .pptx. These file formats are not backward compatible with previous versions of Office. If you send Office 2007 files to people using Office XP or 2003, they will need to install a compatibility pack to open them. (For details, see Tech Tips on page 6.) You do have the option of saving Office 2007 files in the older Office formats.

Office 2004 for Mac can't open files in Office 2007 formats. However, Mac OS X 10.5 (Leopard) – which Apple plans to release this spring – will support the new file formats.

When you open older Office files, Office 2007 automatically turns on Compatibility Mode. This lets you edit and save earlier Office documents, though you won't be able to use new Office 2007 features as you work with them.

Word 2007

Word 2007 offers predesigned Building Blocks – such as pull quotes, sidebars, headers, and footers. These blocks save you from creating the same elements from scratch each time.

PowerPoint 2007

With PowerPoint 2007's Presenter view, your audience sees the slides of your presentation as usual, while the controlling computer shows you multiple panels. Speaker notes are in large type for easy reading. Another panel shows the current slide being displayed, while clickable slide thumbnails let you customize your presentation as you go. A clock shows the elapsed time.

Slide Libraries makes it easy to reuse content from other presentations.

Excel 2007

Excel spreadsheets can now be up to one million rows by 16,000 columns. You'll notice faster calculations in formula-intensive worksheets, and features that make formula writing easier.

You can convert any worksheet range to a table and take advantage of new formatting, sorting, and filtering options. Pivot Tables are also more powerful.

Outlook 2007

Outlook 2007 gives you a consolidated view of your day. A new To-Do Bar integrates tasks, email flagged for follow-up, upcoming appointments, and calendar information.

The Instant Search feature lets you search by keyword through all of your email and attachments. With one click, Attachment Preview allows you to view attachments in the reading pane.

At this time, there's no version of Oracle Connector for Outlook (OCFO) that functions with Outlook 2007. IS&T is working with Oracle to obtain an updated version and will inform the community when it is available.

Obtaining Office 2007

If your department, lab, or center (DLC) participates in the Microsoft Campus Agreement at MIT, you can get the media from your area's software liaison. To check, go to

`web.mit.edu/ist/services/software/msca-officeliaisons.html`

DLCs not funded through this agreement that would like more information can send mail to <liaison-opt@mit.edu>.

For those not eligible for departmental funding, Office 2007 can be purchased directly from GovConnection through the MIT Select Agreement.

Support

IS&T maintains a Microsoft Office 2007 for Windows page at

`itinfo.mit.edu/product.php?vid=730`

IS&T also offers Quick Starts and hands-on courses in Word, Excel, PowerPoint, and Outlook. For details, go to

`web.mit.edu/is/topics/training`

and click on the Training Catalog and Registration link.

If you need help using Office 2007, contact the Computing Help Desk at 253-1101 or <computing-help@mit.edu>.

June Debut: Windows Server Hosting and Management
• Joanne Hallisey

In June, IS&T will expand its system administration services for departments, labs, and centers (DLCs). A new for-fee service will provide hosting and management in the W91 Data Center for Windows servers in the win.mit.edu domain.

The service will handle a full range of day-to-day operations, including

- Installing, maintaining, and monitoring the server equipment and environment
- Providing network connectivity and backup
- Installing operating systems and security patches
- Maintaining databases and applications

For a full listing of what the service will provide, see

`web.mit.edu/ist/services/hosting/managed-detail.html`

Background
Since 2002, IS&T has maintained a server co-location facility in the W91 Data Center. DLCs can house their servers in W91 – an environmentally secure location with rack space, power, cooling, and network connectivity – while system administrators in the DLCs manage the servers remotely. IS&T offers basic and standard plans for its co-location service, depending on the options clients select.

In addition, IS&T's Server Operations Service Center (SOSC) has provided a fee-based hosting and management service for enterprise Unix servers for some time. Over the past year, several clients have asked IS&T to offer a similar service for hosting and managing Windows servers. Some DLCs have contracted with IS&T's Distributed IT Resources (DITR) group for server management, though this is not one of DITR's core services.

In response to the demand for Windows system administration, IS&T chartered a team to look at how best to address client needs. The team included members from the MIT community and a cross-section of IS&T groups.

The team recommended providing system administration for managed Windows servers in the Server Operations Service Center. This service is now being offered to win.mit.edu clients in the W91 co-location facility who have DITR contracts for server management. It will be rolled out to other clients in June.

Benefits
The new Windows server hosting and management service will deliver several benefits. It will

- Increase use of the W91 facility, which is physically secure and monitored around the clock.
- Alleviate demands on IT staff in the DLCs, allowing them to focus attention on other IT issues.
- Minimize the risk of system failures due to location in less secure spaces (e.g., under desks, unlocked closets).
- Decrease the number of servers that are set up in ways that could expose data and/or the MIT network.
- Provide more centralized and efficient support of Windows servers while enhancing professional development opportunities for IS&T staff.
- Save departments money through reasonable fees, based on the SOSC server management points model. For a price list, see `web.mit.edu/ist/services/hosting/pricelist.html`

Focus on Customer Needs
IS&T has been conducting focus groups about the new service, and plans to hold more sessions in the near future. If you would like to participate, contact Joanne Hallisey at <hallisey@mit.edu>.

For more information about IS&T's server hosting and management services, see

`web.mit.edu/ist/services/hosting`

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

New Versions of VirusScan for Macintosh and Windows
IS&T has released updated versions of VirusScan, the anti-virus software from McAfee. VirusScan 8.5 for Macintosh (formerly Virex) runs natively on PowerPC and Intel-based Macintoshes that have Mac OS X 10.4 or later installed. VirusScan Enterprise 8.5i for Windows runs on Windows XP and Vista, which is useful for testers and early adopters of Microsoft's new operating system. **Note:** If you install VirusScan Enterprise 8.5i on Windows XP, you will need to uninstall it in order to upgrade to Vista, then install it again.

If your Windows computer resides on the central win.mit.edu domain, IS&T recommends that you opt-in to VirusScan using the web form at

`wince.mit.edu/optoutrollout/index.jsp`

Machines running Windows XP will receive VirusScan 8.0i; those running Vista will get version 8.5i.

To learn more about the latest versions of VirusScan, go to these pages:

Windows
`itinfo.mit.edu/product.php?vid=737`

Macintosh
`itinfo.mit.edu/product.php?vid=738`

For assistance with VirusScan, contact the Computing Help Desk at <computing-help@mit.edu> or 253-1101.

Support Ending for Mac OS X 10.3
Effective June 30, 2007, IS&T will retire Mac OS X 10.3 (Panther) as a supported operating system. IS&T will no longer write documentation, offer training, or provide Help Desk support for Mac OS X 10.3.

Recent versions of many IS&T-supported applications (e.g., SAPgui 7.0, TSM 5.4, VirusScan 8.5) do not run on Mac OS X 10.3. In addition, Apple has announced plans to release Mac OS X 10.5 (Leopard) this spring. IS&T will ramp up support for this new operating system, while continuing to provide full support for Mac OS X 10.4 (Tiger). If you have questions about plans for Mac OS X, contact the Software Release Team at <swrt@mit.edu>.

Erase Data from Devices Before You Sell or Recycle

• Monique Yeaton

Most of us are aware of the security risks associated with using computers and mobile devices. If you misplace your laptop or cell phone, or leave it out in the open, your data could fall into the hands of unscrupulous individuals. Many users take precautions, encrypting sensitive data and getting STOP tags for theft deterrence. Surprisingly, though, few people realize that there are similar risks associated with recycling or selling computerized electronics.

Mobile Devices

When you're ready to buy a new mobile device, such as a Treo or regular cell phone, often the one you are replacing is just a few years old. There are plenty of people who will happily buy a used phone or PDA – and it's a good way to keep them out of landfills.

A recent study by the security firm, Trust Digital, shows that data from previous owners can be easily retrieved from used phones acquired through sites such as eBay. Resetting a phone, a popular practice among sellers, appears to erase data. But this data can be resurrected using specialized yet inexpensive software found on the Internet.

According to Trust Digital, "Because phone and PDA data is stored in flash memory, it's retained even if the device's battery is drained or removed. To delete flash memory data, users have to do a 'hard reset,' which returns the hardware to original factory condition. Each phone and PDA maker has a different hard reset procedure; some can only be done by a technician or after contacting the phone service's help desk."

In other words, deleting information using the "clear" option in the interface is not a secure method for erasing data. Instead, use one of the following options to erase data from your phone or PDA for good.

• Follow the instructions for erasing data in the manual or on the manufacturer's web site.

• Go to the Wireless Recycling site at www.wirelessrecycling.com It provides a "Cell Phone Data Eraser" with instructions for most models of cell phones and PDAs.

• If you are donating your device to a charitable organization, ask if they will change out the software. This will erase any trace of ownership and remove the phone book and other private information.

• If applicable, remove your device's Subscriber Identity Module (SIM) card. This portable memory chip, used in some models, holds your personal identity information and may contain phone book information and text messages.

• When in doubt about whether sensitive information is retained on your device, you may want to consider the alternative of physically destroying it.

Computers

Recycling or reselling an old computer also poses risks and is more complicated than you might think. Because disposal involves planning, time, and money, old computers often end up in closets, attics, and warehouses gathering dust. According to the International Association of Electronics Recyclers, "About 100 million pieces of computer equipment a year are being added to the massive heap of what's called 'e-waste.' By 2010 that heap will contain one billion units of computer equipment."

Whether you plan to recycle or sell an old computer, be sure to delete the data on it as your first step in decommissioning it. If you wait to do this later on, you may not be able to find the plug or get the computer to boot, but that doesn't mean someone else might not find a way to access the data on it.

Deleted data can often be retrieved. Tossing files into the computer's trash bin and then emptying the trash deletes the record of the file, but not the data the file points to. Think of it as removing the labels from folders in a file cabinet: the folders and information in them still exist, even if retrieving the data now takes more time and effort.

The same is true if you reformat a hard drive: it is still possible for someone with the right tools to retrieve data on the drive.

If you plan to sell or recycle a computer, IS&T recommends that you take these steps.

• Make sure the hard drive is completely erased ("wiped"). You can either do this yourself or pay someone to do it for you. The potential liability if sensitive data gets out easily justifies the cost.

• If wiping the drive yourself, use a utility tool that overwrites every sector of the hard drive with binary 1s and 0s. Tools that meet government security standards overwrite each sector multiple times for added protection. Windows and Linux users can download Darick's Boot and Nuke (DBAN), which is free, at dban.sourceforge.net

Other products for Windows include cyberCide, KillDisk, WipeDrive, and DataEraser. They are all fairly inexpensive.

For Macintoshes with Mac OS X 10.4 installed, you can use Disk Utility's secure erase options. For more information, see docs.info.apple.com/article.html?artnum=303462

• Use a service, such as GreenDisk's Computer and Component Recycling, to securely dispose of old computers. For details, go to greendisk.com

• Don't forget that other storage devices such as USB flash drives and iPods can also contain private information. Before selling or recycling, these also should be erased using the manufacturer's recommendations.

If the data on a computer is classified or highly sensitive, you can take extra measures to make sure the data is unrecoverable – beyond the reach of any decryption tool. For instance, you can take a hammer to the disk platter. Alternatively, there are businesses that will put the disk platter through a shredder, physically altering it, or degauss it, which alters the magnetic storage media. For more about data destruction, see the eWEEK article "E-cyclers Embrace Data Destruction" at www.eweek.com/article2/0,1895,1665653,00.asp

This column presents tips about computing. For more information technology Q&As, check the IS&T Stock Answers database at

`itinfo.mit.edu/answer`

Office 2007 is the latest release of Microsoft's productivity suite for Windows. IS&T supports Word 2007, Excel 2007, PowerPoint 2007, and Outlook 2007.

A major change in the Office Suite is the format in which files are saved. Earlier versions of Office applications save documents with the following file extensions, which are compatible across operating systems and programs:

- Word – **.doc**
- PowerPoint – **.ppt**
- Excel – **.xls**

Office 2007 bases its file formats on XML, and has changed the default file extensions:

- Word – **.docx**
- PowerPoint – **.pptx**
- Excel – **.xlsx**

These new file extensions are currently *not* compatible across operating systems, nor are they backwards compatible with earlier versions of Office. For information about the advantages of the new file formats, see

`office.microsoft.com/en-us/help/ HA100069351033.aspx`

Q I've upgraded to Office 2007. How can I ensure that others will be able open the files I create?

A You can manually change your default Save options to always save to the older file formats. To do so, follow these steps:

1. Open Word, Excel, or PowerPoint 2007, and click the **Microsoft Office Button** in the upper left-hand corner of the ribbon.
2. Click the **Options** button in the lower-right section of the pane.
3. Click the **Save** option.

4. In the **Save file in this format** drop-down field, select the **97-2003 Document** option.

Note that you must do this separately for each Office 2007 application.

Q I have not upgraded to Office 2007. What do I do if I receive an Office 2007 document in one of the new formats?

A To open, edit, and save Office 2007 documents, you will first need to install the Microsoft Office Compatibility Pack for Word, Excel, and PowerPoint 2007 File Formats. You can get it via the MIT Windows Software Download site at

`web.mit.edu/software/win.html`

When you click the **Office 2003 Add-in** link, you will be redirected to the relevant page on the Microsoft site. The Compatibility Pack is 27.1 MB, so it will take some time to download. ⊘

Let Me Count the Ways: Tips for Reducing Your Paper Use

• Amy Donovan

Remember predictions of the paperless office? Today, despite computers (or maybe because of them), we seem to be swimming in as much paper as ever. Some time ago, the MIT Working Group Recycling Committee published a tip sheet on reducing paper use. A selection of these tips – those related to computing and printing – are reprinted here, some with modifications. To read the original article, download the PDF file at

`web.mit.edu/wgrecycling/docs/ monthly_bale/monthlybale_1004.pdf`

You may also want to visit the Cutting Paper web site at

`eetd.lbl.gov/Paper/actions/html`

General Tips for Computer Users

- Use email and attachments for editing and review of documents.
- Save documents electronically rather than printing out a paper copy.
- Design a web page/web site to relay information that's frequently asked for. Update it often.

- Scan and save paper documents in PDF or other file formats that can be sent as attachments in email (or, as appropriate, posted on the Stellar Course Management System).
- Format class materials, documents, and handouts to use the smallest amount of paper possible.
- Cancel your paid subscriptions and read online instead. The MIT Libraries provide electronic access to over 34,000 newspapers, magazines, and academic journals. Check VERA at

`libraries.mit.edu/vera`

to see if your favorite titles are available. In addition, most major newspapers and magazines have web sites you can reference for free. To search and browse 4500 news sources, updated continuously, see

`www.google.com/news`

Tips for SAP Users

- Don't send paper backup to CAO for journal vouchers. When you create a journal voucher and SAP asks if you are sending backup, just say 'No.' By creating a JV that includes as much information as possible, you will save yourself the time spent to make and forward paper backup.

- Electronic DACCA certification requires no paper retention and nothing sent to Payroll. If your DLC continues paper certification, paper DACCAs need to be retained. If you are certifying via proxy, you must retain paper backup. In no case does paper need to be sent to Payroll.

Tips for Printing

- Make double-sided printing the default setting on all printers. Check the manual or ask your local IT support provider for help setting this up.
- Decrease margin space when printing documents. You can adjust margins using the application's "page setup" function.
- To print a web page, select the "Print This Story" option. If that option isn't available, cut and paste the text into a word-processing file, rather than print the whole web page. For long articles, decrease the font size.
- Buy recycled paper. Go to the ECAT/ Office Depot web site at

`web.mit.edu/ecat/officedepot`

and look under My Shopping Lists for Recycled Products. For a copy of the Office Depot Recycled Products catalog, contact <staffrecycles@mit.edu>. ⊘

Reusing or Recycling Older Computer Equipment

The material in this article has been "recycled" from articles in Tech Talk and is&t and content from current web sites.

MIT produces a steady stream of outdated or unwanted computers, monitors, printers, keyboards, and other equipment. To handle this stream, the Institute has several programs in place for reuse or recycling of items, or disposal when appropriate.

The place to start is with MIT's Property Manager, Michael McCarthy, whom you can reach at 253-2779 or <mmccarth@mit.edu>. Let him know what items you have, their MIT property tag 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 (DLCs) would like to acquire. When unwanted items aren't on this wish list, McCarthy sends email to the appropriate "reuse" list to alert interested community members about equipment they might be able to use in their offices. The email 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 details, see

`web.mit.edu/reuse`

If computer equipment owned by MIT isn't needed by anyone at the Institute, it can be 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 to ensure that any equipment bought with government funds is handled properly.

But Wait, There's More

Once departmental equipment is deactivated by the Property Office, DLCs have a range of options for reuse or recycling. To get a deactivation tag, contact Ken McLaughlin of the Property Office at <kenmc@mit.edu>.

• *The Equipment Exchange.* Located in WW15 at 350 Brookline Street, the Equipment 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 to move the equipment. For details, see

`controllers.mit.edu/site/property/resources`

• *Donations to nonprofits.* MIT allows contributions of older computers to various nonprofit organizations. If you're interested in this alternative, see the box below.

• *Recycling through the MIT Department of Facilities.* You can recycle computers, monitors, printers, keyboards, and other equipment through Facilities. Instead of bringing your unwanted equipment to the former drop-off zones in Buildings E19 and 3, Facilities will now pick up equipment at your office for the cost of labor: about $40 for 1–10 computers and $80 for 11–20 computers.

Facilities hires an outside contractor, East Coast Electronics, to recycle unwanted IT equipment. This includes cathode ray tubes (CRTs), such as those in older computer monitors and TV sets. By Massachusetts law, CRTs must be reused or recycled rather than sent to landfills or incinerators. The contractor adheres to a strict "No Landfill" policy.

To arrange for pickup of unwanted equipment, DLCs should submit an Internal Provider requisition through SAPweb. For the vendor, type in Dept. of Facilities Services and indicate MIT Movers. If you are concerned about expenses, consider sharing costs by recycling in tandem with another DLC.

Any questions about this process may be directed to Alana Levine, the Recycling Coordinator, at 253-6360 or <recycling@mit.edu>.

• *Recycling smaller electronics and media through Technocycle.* Facilities also sponsors the Technocycle program for the disposal of cell phones, pagers, PDAs, CDs, diskettes, audio and video tapes, and rechargeable batteries. (Be sure to delete sensitive data before you toss!)

The Technocycle recycling bins are located in most of the distributed mail centers (DMCs) on campus. Another option for disposing of small electronic devices and media is to send them, via campus mail, to Technocycle in Building NW62.

Material in the Technocycle bins also goes to East Coast Electronics for secure and proper disposal.

• *Recycling toner cartridges.* You can recycle small, empty toner cartridges using the postage-paid envelopes found in the DMCs. Large, empty toner cartridges can be returned to the manufacturer in the same box in which they came. Instructions come with the packaging.

The Campus Recycling Scene

For more information on what can be recycled at MIT, see Facilities' Environmental Initiatives page at

`web.mit.edu/facilities/environmental/reuse.html`

Donating Computers to Nonprofit Organizations

Once departmental computers have been deactivated, DLCs have the option of donating them to nonprofits. Before doing so, DLCs should send a list of the items to Ken McLaughlin of the Property Office at <kenmc@mit.edu>.

Here are three organizations that are accepting computers in working order.

• *CommuniTech/Used Computer Factory:* for underserved local families
`web.mit.edu/mitpsc/programs/communitech` <ucf-staff@mit.edu>
Accepts Pentium III or above

• *M.N. Adamov Memorial Fund:* for blind students and professionals in Russia
`www.mnadamovfund.org` <ssussman@mit.edu>
Accepts compact desktops (Pentium IV) or laptops

• *World Computer Exchange:* for underserved youth worldwide
`www.worldcomputerexchange.org` <Boston@WorldComputerExchange.org>
Accepts Pentium III or above; Mac G3 or G4

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

You can also submit a technology question online via Request Tracker on the Getting Help page at `web.mit.edu/ist/help`

For help with...	Dial...	Or send a message to...
General computing questions Macintosh, Windows, network/ connectivity, business applications, computer buying advice	253-1101	computing-help@mit.edu
Athena Computing Environment	253-4435	olc@mit.edu
Computer and printer repairs	253-0815	pcservice@mit.edu
Disabilities and computing	253-7808	atic@mit.edu
Telephone and voice mail services	253-3670	telecom-csr@mit.edu
Telephone repairs	253-4357	3help@mit.edu
Unix/Linux	253-1103	unix-linux-help@mit.edu

Surf Sites: Recycle Recycle Recycle

MIT has many initiatives afoot to benefit the environment. The articles on page 8 of this issue highlight some of the ways that MIT is recycling its IT-related waste (often called e-waste).

There are also useful online resources at the Institute that cover a range of recycling options, such as the Working Green at MIT web site at

`web.mit.edu/workinggreen`

and the MIT Department of Facilities page on Environmental Initiatives at

`web.mit.edu/facilities/ environmental/recycling.html`

Beyond MIT, many web sites make the case for recycling and provide plenty of pointers. Check out the sites on the right to learn more.

Computer Take Back Campaign
`www.computertakeback.com`

Earth911: Recycling Centers, Water Pollution and Conservation, Earth Day
`www.earth911.org`

EPA NE: Electronic Waste and eCycling
`www.epa.gov/region01/solidwaste/electronic`

GreenDisk
`www.greendisk.com`

Massachusetts Department of Environmental Protection: Waste & Recycling
`www.mass.gov/dep/recycle`

ReadyMade: Instructions for Everyday Life
`readymademag.com`

Recycle City
`www.epa.gov/recyclecity`

Treehugger
`www.treehugger.com`

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