

IS&T

News about Information Services and Technology throughout MIT

Volume 21 • Number 1

September / October 2005

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

MIT Wireless Casts a Wide Net	2
Software Spotlight	
Mac OS X 10.4 Is Chock Full of Solid New Features	3
Network Notes	
Preferred for Email: Outlook Express, Outlook, Apple Mail	4
Bits and Bytes	4
Safe Computing	
How to Protect Yourself from Identity Theft	5
Post and Publicize Events on MIT's Improved Calendar	5
Tech Tips: Outlook Express	6
Libraries Add Over 11,000 MIT Theses to DSpace	6
Administrative Aspects	
EHS Inspections and Audits Process Moves to SAP	7
IS&T Launches Departmental Database Development	7
Getting Help	8
Surf Sites: Home Improvement	8

The PlaceLab: Testing High Tech in a Home Environment

• Lee Ridgway

New full-serv condo, betw MIT/Harv. 1000 sq ft, furn. Liv rm, din rm, bdrm, ofcc, 1-½ bths, kitch, W/D. Avail shrt-trm. FREE!

Now that's a real-estate ad to grab your attention! So what's the catch? Well, you need to be a participant in a PlaceLab research project. And what is the PlaceLab? An innovative concept for studying technologies for everyday living in a true home environment. The PlaceLab is a real condo, in a real condo building, which has been turned into a live-in laboratory, equipped with all the comforts of home, and then some.

A Sensory Environment

The PlaceLab, begun in 2003, is a collaboration between the MIT House_n consortium and TIAX, an independent research company based in Cambridge. House_n is a multidisciplinary project in the Department of Architecture, led by Kent Larson, with Stephen Intille as technology director. In an interview, Intille filled out the details of the PlaceLab and the kinds of research it is intended to support.

From outward appearances, the PlaceLab looks like a typical contemporary apartment. Not so apparent are the sensors, cameras, and microphones that can record just about every aspect of the research participants' activities

as they go about their daily living. Behind the walls is a complex infrastructure of cabling, connectors, computers, and controllers within closed cabinets and server closets to tie it all together.

Over 200 devices are deployed discreetly throughout the condo for gathering information about what is going on within. Wired into the data-gathering equipment are audio and video recording devices (except in the bedroom and bathroom); environmental sensors for temperature, humidity, and air quality; communications equipment; and more. Added to this are new types of sensors, called MITes, being developed by House_n researchers under a grant from the National Science Foundation.

MITes (for MIT environmental sensors) are about the size of a large postage stamp and less than two centimeters thick. They are portable, wireless, programmable devices that can be optimized for one thing. Essentially microchips, their eventual low cost would let a researcher put as many in an environment as are needed. MITes are designed with simplicity and robustness in mind, so that any person could take a bunch home and install them without the help of an expert, and have them actually work.

Intille described two MITes models for recognizing physical activity or motion. One, a 3-axis accelerometer, is designed as a "wearable" to be attached

continued on page 2 ►

▼ THE PLACELAB

continued from page 1

to your wrist, ankle, waist, or other part of the body to detect physical activity. The device can be programmed in conjunction with other sensors to distinguish between different types of activity, such as sitting or standing, walking or running, brushing teeth or scrubbing windows (remember, the PlaceLab is just like home).

The other type of MITes is designed for stationary placement in or on something, such as drawers, doors, switches, and telephones. The device remains in sleep mode until the object to which it is attached is moved. It then wakes up and sends a signal to the data-gathering equipment, indicating when its drawer or door was opened or closed, or its light switch turned on or off.

Driving the sensing, recording, and computing power are the researchers' needs for details about a person's behavior in a home environment, and how that behavior relates to whatever technology is being tested. As Intille put it, "It's about understanding all the little things that would make or break whether or not a particular device is going to work for that person."

Tuning In

So far, in addition to House_n and TIAX projects that tested sensors, two Media Lab thesis projects have made use of the PlaceLab for research. Pallavi Kaushik, a master's candidate in Media Arts and Sciences, used the PlaceLab to study a reminder system for adhering to a medication regimen. Kaushik's system takes into account what the person is doing to make the reminders context-sensitive. For example, the reminder may be presented in one way if you just got out of bed, but in another way if you are cooking a meal. And if the system sensed that you took the medication before being reminded, it would acknowledge that or just keep quiet.

Jason Nawyn, also a master's candidate in Media Arts and Sciences, developed a system to motivate less sedentary behavior and more physical activity – in other words, stop watching TV and get moving. Nawyn based his system on theories of behavior modification to persuade in a nonintrusive, positive manner, so that it is not seen as an annoyance.

Part of the reasoning behind these projects, and others envisioned for the PlaceLab, is to develop systems attuned to a person's activity, so that reminders and other kinds of prompts may be perceived as less disruptive, and more

helpful and welcome. For Intille, it is about "the subtle use of technology to enhance the quality of life in the home."

A Place to Stay

The PlaceLab is open to researchers from departments across MIT, as well as organizations outside of MIT. One of its key functions is to be an intermediate testing facility between a lab situation and a study that involves several homes using portable sets of sensors. It serves as a "scientific instrument" for pilot testing and preliminary data gathering before moving to larger-scale studies. Interested researchers should send mail to Stephen Intille <intille@mit.edu>.

And about that "ad"? It is for real: the PlaceLab is seeking to increase its base of volunteer study participants, which means a stay in the condo of two weeks or more. For details, send email to <homestudy@mit.edu>.

To learn more about the PlaceLab and its partners, see

House_n

http://architecture.mit.edu/house_n/

The PlaceLab

http://architecture.mit.edu/house_n/placelab.html

TIAX, LLC

<http://www.tiax.biz/> ☉

MIT's Wireless Casts a Wide Net

MIT's campus-wide wireless network is nearing completion. IS&T has expanded the network by 1800 access points in 18 months, bringing the total number of access points to about 2800. IS&T will continue to work with departments, labs, and centers, as well as Facilities and MIT Housing, to provide full wireless coverage by the end of 2005 (though Briggs Field may need further boosts when spring training gets going).

You can view coverage of individual MIT buildings at

<http://web.mit.edu/network/wireless-map.html>

IS&T is striving for robust connectivity across campus. If you are aware of any weak-to-no coverage areas, send your feedback to <unwired@mit.edu>.

iSPOTS

Dovetailing with the expansion of MIT's wireless network is the opening of the iSPOTS exhibit on November 1

at the MIT Museum. This exhibit features videos showcasing the work of iSPOTS, a project led by Carlo Ratti, Director, and Andres Sevtsuk, RA, at MIT's SENSEable City Laboratory.

At the heart of iSPOTS is the observation that "the effects of complete wireless coverage are monumental, as traditional work spaces are abandoned in favor of more enjoyable environments such as campus lounges and public spaces." iSPOTS is documenting these changes in real time on an electronic color map, using log information from MIT's wireless network. Over time, this monitoring will highlight how technology is modifying the use of public spaces on campus.

iSPOTS is also developing an applet that will let wireless users share their MIT location information with others. A third planned initiative is the implementation of a voice-over-IP system running on MIT's wireless network.

To learn more about iSPOTS, see <http://ispots.mit.edu/ispots.html> ☉



Information Services & Technology

Managing Editor

Robyn Fizz

Writer/Editor

Lee Ridgway

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

Send comments or subscription requests to: MIT Room N42-290B, 77 Massachusetts Avenue, Cambridge, MA 02139-4307
Phone: (617) 253-0540
Electronic mail: <fizz@mit.edu>

is&t is published online at <http://web.mit.edu/ist/istnews/>

The IS&T web site also offers frequent news updates on its home page or at <http://web.mit.edu/ist/news/>

All product names are trademarks or registered trademarks of their respective manufacturers.

© 2005 Massachusetts Institute of Technology



Mac OS X 10.4 Is Chock Full of Solid New Features

• Al Willis

Mac OS X 10.4 (“Tiger”) is Apple’s fifth major release of Mac OS X since 2001 and, in many ways, its most ambitious. This version is stuffed with over 200 new features that enhance its “best of both worlds” status – combining the Macintosh’s ease of use and eye-catching user interface with the power of Unix underpinnings.

However, like any new operating system, Tiger presents some compatibility issues. For example, SAPgui 6.20 doesn’t function properly under Tiger; some transactions don’t work or may cause SAPgui to crash. If you need a full version of SAPgui (as opposed to SAPweb), you can use Citrix to access the Windows version of SAPgui from your Macintosh. SAPgui 6.40 should be available for Tiger users in November.

OpenAFS is not available for Tiger; Apple, MIT, and contributors to the OpenAFS open-source project are working to enable this technology under Tiger.

New Features

Apple has posted comprehensive information about Tiger’s new features at

<http://www.apple.com/macosx/>

Three of the most noteworthy are Dashboard, Spotlight, and Automator.

Dashboard

Perhaps Tiger’s most popular feature, Dashboard displays selected mini-applications known as widgets. Widgets let you access information quickly – you can, for example, look up the definition of a word in the Dictionary widget or someone’s email address in the Address Book widget. Widgets also provide status information – such as the current temperature or location of an airline flight.

You can activate Dashboard by pressing F12 or clicking its icon in the Dock. This causes your collection of widgets to appear over a dimmed desktop. Current windows and applications are unaffected. The Dashboard disappears again with a single keystroke.

Widgets use standard Web technologies – HTML, CSS, and Javascript –



which may explain why over 1,000 widgets have already been released. Apple maintains a catalog of widgets at

<http://www.apple.com/downloads/dashboard/>

Spotlight

Spotlight, Tiger’s search technology, maintains an index of information, or metadata, about your files; it automatically updates the index as you create, delete, or modify files. Applications that are Spotlight-aware (e.g., Finder, Mail, Address Book) use the index to find files that match search criteria.

Clicking on Tiger’s Spotlight menu brings up the Spotlight field; almost as soon as you begin typing, Spotlight displays matching items. Spotlight indexes the contents of many types of files, such as text, PDF, and Microsoft Word, enabling it to display files that contain the text you’ve entered in the search field. Spotlight can also display items from Mail’s inbox, your Address Book, or an iCal calendar. You can disable certain files from being searched by using the Spotlight preference pane in System Preferences.

Spotlight also provides Smart Folder functionality in the Finder: by selecting New Smart Folder from the File menu, you can create a folder that contains files which match particular criteria – such as Word files labeled Special Project that have been modified in the last two weeks. Any file that matches these criteria will appear in the Smart Folder, regardless of its actual location on the hard drive.

Finally, Spotlight is extensible; developers can create plug-ins that enable new document types to be indexed and searched.

Automator

Automator lets you easily automate a series of steps that you can repeat as needed – no programming required. If every week, for example, you use SAPweb to create a report, turn it into a PDF, and email it to ten team members, you could use Automator to do those steps on a weekly basis.

The programs that ship with Tiger, such as Mail, Address Book, and Safari, come with actions that can be linked

together to create a workflow. You can save a workflow in different formats, depending on what it will be used for. For example, you can save a workflow as an application that can be launched from the Finder, or as a plug-in that can be accessed from a contextual menu in the Finder or the Script Menu. The scenario of needing to email a PDF to a team can be handled by saving a workflow as a PDF print plug-in that can be accessed when printing the report.

Some third-party applications such as FileMaker 7 have built-in Automator actions; for more information, see

<http://www.apple.com/downloads/macosx/automator/>

Under the Hood

Tiger has many changes for users interested in what’s happening beneath the surface. For starters, Tiger supports 64-bit addressing, allowing updated applications to use more than 4GB of RAM on Power Mac G5s. It also ships with the latest Unix commands from FreeBSD 5.0 and a new kernel that makes running on multiple processors more efficient. Spotlight is accessible from the command line by using the `mdfind` command; you can display a file’s metadata using `mdls`. Utilities that deal with files (`cp`, `mv`, `tar`, `rsync`) properly handle resource forks. For more about Unix features, see

<http://www.apple.com/macosx/features/unix/>

Getting Tiger

IS&T has a limited number of Tiger licenses available for faculty and staff using MIT-owned Macs. For guidelines on requesting Tiger licenses, see

<http://web.mit.edu/ist/products/vsls/mitmacos/>

You can either contact your department’s Software Liaison for install media or download disk images and burn them to CD.

Support

For help with Tiger, see the Mac OS X 10.4 page at

<http://itinfo.mit.edu/product.php?vid=686>

It covers system requirements, known issues, and upgrading instructions.

If you need additional assistance, contact the Help Desk at <computing-help@mit.edu> or 253-1101. ☛

Preferred for Email: Outlook Express, Outlook, Apple Mail

• Heather Anne Harrison and Lee Ridgway

Most of us rely on email, so it makes sense to choose an email program and protocol that works well at MIT. IS&T has encouraged new faculty, students, and staff to use the email program bundled with their operating system: Outlook Express on machines running Windows XP Professional and Apple Mail on machines running Mac OS X. IS&T also supports Outlook 2003 – bundled with Office 2003 Professional for Windows – for email.

All three programs are offered only as Internet Mail Access Protocol (IMAP) clients at MIT; support for Post Office Protocol (POP) is not available. IMAP, the recommended protocol, stores your email on a server so that you can access it from almost any connected computer.

As discussed with IT Partners and in other community forums, IS&T recommends that users who want to transition from POP to IMAP move from stand-alone applications such as Eudora to Outlook Express, Outlook, or Apple Mail.

Outlook Express

Outlook Express 6 supports

- Easy migration of Eudora mailboxes and address books
- Ability to receive mail from multiple email accounts
- Simple Mail Transfer Protocol (SMTP) authentication using Secure Sockets Layer (SSL)
- Lightweight Directory Access Protocol (LDAP; e.g., MIT Directory)

Outlook Express cannot be used with Oracle Connector/TechTime.

While IS&T did not recommend older versions of Outlook Express due to security concerns, Outlook Express 6 is safe to use as long as you keep your operating system and software up to date. You can do this by configuring Windows Update on your machine or by using the MIT Windows Automatic Update Service (WAUS) at

<http://web.mit.edu/ist/topics/windows/updates/>

It's also important to follow the security recommendations at

<http://itinfo.mit.edu/article.php?id=7883>

For details on using Outlook Express at MIT, go to

<http://itinfo.mit.edu/product.php?vid=684>

Outlook 2003

Outlook 2003 offers the same features as Outlook Express, with a few exceptions.

- Importing Eudora email and address books into Outlook is more involved (see <http://itinfo.mit.edu/article.php?id=7022>)
- Outlook works with Oracle Connector/TechTime
- Outlook lets you filter IMAP email

To keep Outlook 2003 current, apply the Office Updates available from

<http://office.microsoft.com/en-us/officeupdate/default.aspx>

For more on using Outlook 2003 at MIT, see

<http://itinfo.mit.edu/product.php?vid=614>

Apple Mail

IS&T supports Mail 2.0 – part of Mac OS X 10.4, and Mail 1.3.x – part of Mac OS X 10.3.x. Mail 2.0 offers

- Simple Mail Transfer Protocol (SMTP) authentication using Secure Sockets Layer (SSL)
- Lightweight Directory Access Protocol (LDAP; e.g., MIT Directory)
- Filtering of IMAP email
- Organizing tools such as Smart Folders, Mailboxes, and Groups

For a full overview of features, see

<http://www.apple.com/macosx/features/mail/>

To stay current with operating system, security, and Mail updates, Macintosh users should configure Software Update for daily checks.

For more information about Apple Mail at MIT, start at

<http://itinfo.mit.edu/product.php?name=applemail>

Support

For assistance with Outlook Express, Outlook, or Apple Mail – including help configuring IMAP – contact the Computing Help Desk at

computing-help@mit.edu or 253-1101. ☎



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

MIT Spam Screening Adds Automated Purging Feature

MIT Spam Screening, available at

<http://web.mit.edu/ist/services/email/nospam/>

gives users of MIT email the option of screening incoming messages for spam. Once mail is identified as spam, it can be filtered to avoid cluttering your inbox.

If you use an IMAP email client, such as WebMail, Outlook Express, Outlook, or Apple Mail, you can enable automated purging of your Spam-screen folder. Until recently, automated purging had one setting: to delete messages older than 21 days.

Many users requested the ability to purge spam messages faster, to preserve their email quota. That enhancement has been added. You can now set your automatic purge threshold to be anywhere from 1 to 31 days. The default is still 21 days.

To update your MIT Spam Screening settings (certificates required), see <https://nic.mit.edu/cgi-bin/spamscreen>

Support for Fetch 5.0.2 for Macintosh

IS&T now supports Fetch 5.0.2. This software transfers files from your Macintosh safely across the network to another computer or server using File Transfer Protocol (FTP). You can also use Fetch to perform maintenance tasks – such as renaming, moving, deleting, and changing permissions of files, and creating directories on a remote web server.

Fetch uses Kerberos and encryption to make your logon and transfer of data secure.

The latest version of Fetch sports a redesigned user interface, with context-sensitive menus and a Recent Connections pop-up menu. It supports SSH File Transfer Protocol (SFTP) and offers improved compatibility with a range of servers.

To learn more about new features and how to obtain and install the software, go to the Fetch at MIT page at

<http://itinfo.mit.edu/product.php?name=fetch> ☎



How to Protect Yourself from Identity Theft

• Andrew Shafer

Personal and financial data – such as your birthdate, Social Security Number, and credit card numbers – are becoming easier and easier to find online. This information is put into digital storage by the companies you do business with and through the online forms you fill out. Once this data is stored on a networked machine, you are at risk for identity theft.



While you can't completely safeguard yourself from identity theft, you can

take steps to make it harder for others to obtain and use your personal data.

- Order your credit report at least once a year, and correct any mistakes you find. U.S. citizens can get a free credit report annually from <http://www.annualcreditreport.com>
- Check your monthly credit card and banking account statements for unknown transactions. Report any discrepancies as soon as possible to the account holder or bank.
- Never carry your Social Security Card in your wallet unless you need it that day.
- Limit the number of your active credit accounts and carry only one or two credit cards. The more accounts you have, the greater your exposure to fraud.
- Contact the company of any account that uses your Social Security Number (SSN) as an identifier, and ask to have it changed to another number. Be sure your driver's license number is not your SSN or a derivative of it. Tell the financial institutions you deal with (bank, credit card companies, mortgage holder) that they are not authorized to sell or share your contact information with other businesses.
- Never use easily discovered information for passwords or PIN numbers. "Taboo-to-use" data includes

birthdates, anniversaries, SSNs, middle or maiden names, family members' or pets' names, phone numbers, and street addresses.

- Never give out personal information over the phone unless you have an established relationship with the business and you initiated the conversation. If a business asks for your SSN, ask why they need it and what will happen if you don't provide it. If they want it only for tracking purposes, request that they use a different number. If they require your SSN and are not a government agency or lending firm, consider doing business elsewhere.
- Limit your exposure by opting out of prequalified credit offers at <http://www.optoutprescreen.com>
Destroy all credit card offers received in the mail that you don't intend to pursue. Shred all unsolicited bank checks and bank documents that you don't archive to prevent the theft of bank routing numbers.
- Limit your exposure to telemarketing calls by filling out the form at <http://www.donotcall.gov>
Charities and businesses with which you have established relationships are exempt from this, unless you tell them on the phone that you don't wish to receive calls. Be firm, and don't be afraid to hang up if a caller refuses to take "no" for an answer.
- Do *not* click on links in email asking you to confirm your account. If you believe the message to be legitimate, contact the company by phone or via its web site – which you've reached by typing its URL. Shred or delete any notification of "lottery winning distributions" and offers of wealth from Nigeria, South Africa, or the Far East.
- Keep your computer patched and firewalled and scan for viruses to prevent malicious software from capturing your data. For more on securing your computer, see <http://web.mit.edu/ist/topics/security/>
If you have questions about how to protect yourself from identity theft, contact IT Security Support at <infoprotect@mit.edu>. ☺

Post and Publicize Events on MIT's Improved Calendar

• Susan Curran

The improved MIT Events Calendar at <http://events.mit.edu/> is faster, easier to navigate, and quicker to search – by keyword, date, category, or event sponsor. More flexibility lets event planners post their events once and publish just about everywhere.

Editor's picks change on reload to showcase student and community life. Additionally, events are displayed in the new Lobby 7 kiosk, and may be selected for *Tech Talk*, the News Office web site, or the MIT home page.

RSS and SOAP

New tools – Really Simple Syndication (RSS) and Simple Object Access Protocol (SOAP) – help MIT web publishers make better use of the calendar.

RSS lets users subscribe to web sites of interest. The calendar's RSS feed contains a title and brief description of that day's events together with a link to the full listing. You can subscribe via reader software on your computer or include the feed on your web site.

For programmers, there is a SOAP-compliant web service that can be used to query the calendar data in more detail. Through this service, the MIT community can use the events calendar as a central resource and extract event information in customized ways. Documentation for using this API with Java, Perl, and PHP can be found at <http://events.mit.edu/help/soap/>

Posting Your Events

Based on user feedback, there's now greater flexibility when adding and editing events. The categories have been revised, and events can be listed in more than one category and have more than one sponsoring group. There's also support for repeating and series events.

To display your group's events on your web site, you can create a custom calendar with your own look and feel, or create a calendar with events from multiple groups.

The calendar is sustained by the community, and relies on event planners to post their events. If you would like to get started posting events, visit <http://web.mit.edu/ist/services/events/eligible.html>

The calendar is a project of the Information Center, IS&T, and the Office of the Dean for Student Life. ☺



This column presents tips about computing. If you have a question you would like to see answered here, send it via email to <techtips@mit.edu>.

For more information technology Q&As, check the IS&T Stock Answers database at <http://itinfo.mit.edu/answer/>

Q How can I save my Outlook Express messages to my hard drive? I'd like to have a backup of the mail files stored on the IMAP server.

A Follow the steps outlined below to save your messages locally:

1. On the **Tools** menu, click **Options**.
2. On the **Maintenance** tab, click **Store Folder**.
3. Select the folder location, and then press **CTRL+C** to copy the location.
4. Click **Cancel**, and then click **Cancel** again to close the dialog box.
5. Click **Start**, and then click **Run**.
6. In the Open box, press **CTRL+V**, and then click **OK**.

7. On the **Edit** menu, click **Select All**.
8. On the **Edit** menu, click **Copy**, and then close the window.
9. Right-click any empty space on your desktop, click **New**, and then click **Folder**.
10. Type **mail backup** for the folder name, and then press **ENTER**.
11. Double-click the **Mail Backup** folder to open it.
12. On the **Edit** menu, click **Paste**.
13. Close the **Mail Backup** window.

Q How can I import my Eudora mail into Outlook Express?

A Using the Outlook Express Import Wizard, you can easily import messages from a variety of popular email programs, such as Eudora.

1. On the **File** menu, point to **Import**, and then click **Messages**.
2. Select the email program you want to import messages from, and then click **Next**.

3. Verify the location of your messages (normally **C:\Users\Eudora**), and then click **Next**.
4. Choose **All folders** to import all messages, and then click **Next**. You can also choose **Selected Folders** to import messages from one or more folders.
5. Click **Finish**.

Q How can I back up my Address Book?

A It's a good idea to export and back up your local mail contacts regularly. Here's how.

1. On the **File** menu, point to **Export**, and then click **Address Book**.
2. Select the address book you want to export, click **Export**, and then proceed through the wizard.

On a related note, Outlook Express lets you look up contacts on the MIT Online Directory (an LDAP server). For configuration instructions, see

<http://itinfo.mit.edu/article.php?id=7873>

Libraries Add Over 11,000 MIT Theses to DSpace

• Heather Denny

The MIT Libraries recently added over 11,000 electronic copies of MIT theses to DSpace – doubling the content of the digital archive and providing worldwide exposure to the work of MIT scholars. The MIT thesis collection is already one of the most widely used collections of its kind. It includes the theses of well-known MIT alumni such as Charles Stark Draper '26, Harold Eugene Edgerton '27, I.M. Pei '40, Edwin "Buzz" Aldrin '63, Shirley Ann Jackson '73, and Nobel Prize winners Kofi Annan '72 and Richard Feynman '39, to name a few. In DSpace their work, and the valuable research of many others, will now be even more accessible from the Web.

You can find theses on the DSpace web site at

<http://libraries.mit.edu/mit-theses/>

They are organized by academic department and can be easily searched by

author, degree, title, thesis supervisor, and keyword. Each thesis has its own permanent Internet address, or handle: this link ensures that the thesis will be preserved and accessible in the future.

Each thesis in DSpace has two PDF files: a printable PDF, freely available to current MIT students, faculty, and staff (certificates required), and a viewable, but nonprintable PDF, available to non-MIT users. The option to "Purchase a Printable PDF or Paper Copy" is available from each thesis summary page in DSpace.

The entire MIT thesis collection, maintained by the MIT Libraries and Institute Archives, contains over 100,000 doctoral, master's, and select bachelor's theses completed between 1868 and 2005. The 11,000 theses in DSpace represent those that have been digitized since 1999, when the Libraries began scanning theses on demand. Earlier collaborations with MIT departments also resulted in the electronic submission of several hundred theses. In 2004, the Libraries began scanning and adding to DSpace all new theses submitted to them. Recent MIT gradu-

ates or students about to complete their degree may also submit their theses directly to DSpace by following the instructions at

<http://web.mit.edu/etheses/>



About DSpace

DSpace is a unique digital repository that was created in 2002 by the MIT Libraries and Hewlett-Packard to capture, preserve, and share MIT's intellectual output with the world. Developed as an open-source software platform, DSpace has been implemented and adapted by hundreds of institutions around the globe. In addition to the collection of MIT theses, the content in DSpace continues to grow – it currently contains the digital works of 49 communities, representing collections of MIT faculty, researchers, labs, and centers. To find out more about DSpace or the MIT Theses in DSpace project, send mail to <dSPACE-help@mit.edu> or visit

<http://libraries.mit.edu/dspace-mit/>



EHS Inspections and Audits Process Moves to SAP

• Stephani Roberts Lincoln

In August, IS&T's Administrative Computing delivered Inspections and Audits, the second phase of the Environment, Health, and Safety Management System (EHS-MS) to be implemented in SAP. You can find it via the EHS tab on the SAPweb site at <http://web.mit.edu/sapweb/>

The Inspections and Audits application documents and tracks the departments, laboratories, and centers (DLC) inspection process. This includes inspections findings and corrective and recommended actions. A twice-a-year Level II inspection for the Biology Department, for example, entails checking off a standard list of 40+ questions. If the response to a question (e.g., "Are the ceiling sprinklers and circuit breakers in the labs unobstructed?") results in a "finding," the details are written up, along with a description of the action to be taken to remedy the situation (e.g., ask Facilities to send personnel to remove the obstruction).

A follow-up inspection may take place to ensure that the problem was fixed.



Before the implementation of the Inspections and Audits application, DLCs relied on a paper-based inspection process for biannual Level II inspections. The new system facilitates the creation of centralized inspection data and the tracking of inspection history across nearly 4,000 laboratory and facility areas.

Custom Worksheets

The new application lets EHS Coordinators performing an inspection create a custom worksheet limited to questions that apply to their DLC. The custom worksheet can be printed out and used for gathering inspection details (e.g., findings with regard to OSHA-required housekeeping, safety, personnel training, hazards, and waste management). Details of the findings are then entered into SAPweb Inspections, and a findings report is created. Reports with items requiring attention will trigger email letters that are sent

to appropriate parties. Some finding reports will require an online response from the responsible party. Inspections, reports, and responses are tracked, archived, and accessible to some within the application. An integration point with SAP Plant Maintenance allows for automatic generation of work orders to address findings. Reporting within a principal investigator's (PI) area is available to the EHS Office, the DLC EHS Coordinator, and the respective PI via the MIT Data Warehouse.

The Big Picture

Centralization of the inspection process gives MIT's EHS Office a more complete picture of campus-wide efforts and encourages greater compliance. In addition to the main MIT campus, Lincoln Laboratory will also be using Inspections and Audits. With this new application in place, both organizations will be able to collaborate and strengthen the inspection process at MIT.

Questions?

If you have questions about using the EHS tab in SAPweb, send email to <environment@mit.edu> or call 252-3477. ☎

IS&T Launches Departmental Database Development

• Jeff Reed

In early August, IS&T rolled out departmental database development services to the MIT community. These services are being coordinated by the Departmental Consulting and Application Development (DCAD) Team – created in response to recommendations by a cross-departmental group commissioned by IS&T Vice President Jerry Grochow.

The DCAD Team has been formed by expanding on IS&T's Web Communications Services Team (WCS). In addition to the web consultation that WCS has provided to the community, the DCAD Team will consult with MIT departments, labs, and centers on departmental database initiatives.

Services Offered

DCAD services are intended to help departments meet local database requirements for academic, research, and administrative activities while using standard approaches and linkages to MIT enterprise systems. Services include

- Developing databases that meet department requirements and leverage the MIT infrastructure
- Helping departments migrate existing databases to the newest version of products such as FileMaker
- Deploying departmental Web applications

After an initial consultation, DCAD will either work with the department or refer the client to recommended vendors who subscribe to DCAD's guidelines and best practices.

Following on the business model established in WCS, select DCAD ser-

vices will be provided at no cost while others will be fee-based.

- *No-Cost Services.* DCAD consultants will provide, at no cost, an initial needs assessment based on project goals and objectives. They will help find internal and external resources and provide needed oversight.
- *For-Fee Services.* Fee-based services offered by DCAD include the creation of requirements documentation; project management; database development; and application support and maintenance.

Curious?

Starting with pilot projects, DCAD's goal is to offer a robust, responsive service across the campus. To find out more about DCAD services, see <http://web.mit.edu/ist/dcad/>

To discuss how DCAD might be able to help your department, contact the team at <dcad@mit.edu> or 253-3500. ☎



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 question online via Casetracker at

<http://casetracker.mit.edu/>

For help with...

General computing questions
Macintosh, Windows, network/
connectivity, business applications,
computer buying advice

Academic computing

Athena Computing Environment

Computer and printer repairs

Disabilities and computing

Telephone and voice mail services

Telephone repairs

Unix/Linux

Dial...

253-1101

253-0115

253-4435

253-0815

253-7808

253-3670

253-4357

253-1103

Or send a message to...

computing-help@mit.edu

et-consult@mit.edu

olc@mit.edu

pcservice@mit.edu

atic@mit.edu

telecom-csr@mit.edu

3help@mit.edu

unix-linux-help@mit.edu



Surf Sites: Home Improvement

The PlaceLab is a real condo set up for evaluating new technologies for everyday living (see lead article). While automated homes may be the wave of the future, there's still a lot you can do to make homes with lesser IQs more efficient, comfortable, and aesthetically pleasing.

If home improvement is on your to-do list, you may want check out the web sites on the right. You can find out about environmentally "green" materials, how to get a jump start on remodeling, or even what it takes to "wire" your home for the future.

BobVila.com: The Ultimate Home Site

<http://www.bobvila.com/>

Boston Building Materials Resource Center

<http://www.bostonbmr.org/bostonbmr/>

Energy Savers

<http://www.eere.energy.gov/consumer/tips/>

Greenerbuilding

<http://www.greenerbuilding.org/>

Home Improvement Encyclopedia

<http://www.bhg.com/bhg/category.jhtml?catref=cat10002>

Smarthomes: Wiring Homes for the Future

<http://www.smarthomes.ie/>



Information Services & Technology



is&t is printed with soy inks on recycled paper, and can be recycled in MIT's "mixed paper" bins.