Electronic Lens: A Digital Take on the Streets Where We Live

Robyn Fizz

The richness of the Web is about to hit the streets. Several research and commercial projects are exploring the potential of location-aware services. Most rely on a tagging system – for example, physical tags attached to buildings – that can then be scanned and read by mobile camera phones.

Among these projects is Electronic Lens – eLens for short – an initiative of the MIT Media Lab. Headed by William Mitchell and Federico Casalegno, eLens is defined by its focus on benefits for local citizens. It’s intended as a tool to improve civic participation. Fittingly, the project counts students, vendors, and corporate and civic partners – including the government of Catalonia in Spain – among its participants.

The Civic Viewfinder

The project began with a metaphor, that of an electronic lens that you can aim at civic institutions, a “viewfinder” that makes these institutions more transparent. Pointing eLens at a train station could let you retrieve the day’s schedule for different tracks, while pointing it at a museum might list current exhibits and upcoming lectures.

Real-time access to location-based data can be very useful, but Casalegno notes that eLens has been designed to do more than deliver a one-way stream of official information. It’s designed to encourage innovation in how institutions deliver services and communicate with their constituents – with citizens actively joining in the conversation.

Over the years, inventions have spurred new ways for individuals to interact with civic institutions. Way back when, you went to City Hall to get forms or turn them in. With the advent of the telephone, government offices set up public phone numbers and trained staff to answer them. When the Internet became a mainstay, towns created web sites that let you download forms and pay bills online.

eLens is exploring the next wave – interactions that depend on where you are and what you want to know or say. In the eLens team’s vision, you could aim your mobile phone at your child’s school and start a voice thread to discuss cuts in after-school programs. Or you could let passersby know that the local folk music club serves great vegetarian meals.

The Basics

The eLens system is made up of three primary components:

1. Interactive Tags. Tags – which can be attached to buildings or objects – display icons that a camera phone can scan, much like reading a bar code. Each tag is a unique identifier. Tags can be official (marked with an institutional logo) or made by individuals using their computers and printers.

continued on page 2
A camera phone. The eLens project has been using the Motorola A100 mobile phone with a 1.2 megapixel camera and a global positioning system. Users can place a tag on a building, scan the tag with their camera phone, locate the building on a digital map, and add the building name. These simple steps make the tag readable.

3. Software. eLens depends on several behind-the-scenes programs. These include:
   • D-Touch. This image recognition software scans and reads tags.
   • RadioActive. This program lets users post and retrieve voice messages on a tag, and participate in asynchronous voice discussion forums.
   • Constellation. With this software, users can create social networks. Users choose which set of networks to access at any given point. These can range from public forums to a private network for friends or family.

It’s Time to Renew MIT Web Certificates

Certificates are your key to secure web services at MIT – including ECAT, Employee Self-Service, SAPweb, and Web-SIS. Certificates provide authentication between your computer and the secure Web server, and set up a connection that ensures the privacy of transactions over the Web.

Access to MIT’s secure web servers requires two types of certificates: the MIT Certification Authority (MIT CA) and your personal certificate. These certificates expire periodically; you need to renew your personal certificate annually, while the new MIT CA lasts 20 years. This year’s renewal period coincides with the launch of MIT’s new HR-Payroll system, so IS&T is working closely with the community to ensure a smooth renewal process for everyone.

From Classroom to Field Trial

The eLens project has run as a design workshop for two semesters, tapping students from the MIT School of Architecture, Sloan School, and Media Lab, as well as from the Harvard School of Design. In the first semester, three groups investigated options for communications, services, and technology. Each group looked at what was already available and then held brainstorming sessions. In the second semester, the students rolled up their sleeves to build and test the eLens prototype.

This April, in collaboration with the government of Catalonia, the eLens team conducted its first field trial in Manresa, Spain. The team asked 18 local high school students – from architecture, civics, and information technology courses – to post information about three tourist routes in Manresa. These routes were based on three architectural periods: medieval, baroque, and modern. The students posted official information and also recorded their own impressions about the buildings. The idea was to match institutional information with the experiences of local citizens.

The field trial achieved its goal of proving that eLens is a viable concept. While the team is still analyzing the results of the field trial, it is also planning for wider deployment and further testing.

See for Yourself

To learn more about the eLens project, go to http://mobile.mit.edu/elens/

This web site includes a video clip of the field trial in Manresa, which offers a quick glimpse of how eLens works.

To explore the coming wave of location-based services, check out Surf Sites on page 8 of this issue.

Browser Support

To renew your certificates, you need to be using a web browser that supports certificates. To see IS&T’s list of recommended browsers, go to http://web.mit.edu/ist/topics/browsers/

Steps for Renewal

To get a new personal certificate (good until July 31, 2007), go to the Certificates at MIT page at http://web.mit.edu/ist/topics/certificates/ and click on the link “Get MIT Personal Certificate.” Once you’ve completed this procedure, you will be prompted to download a new MIT CA. The MIT CA is valid through August 2026.

Note: If you use Safari for Mac OS X or Internet Explorer for Windows, you’ll need to take additional steps to install the MIT CA; instructions are available from the Certificates at MIT web page.

If you use certificates on multiple machines, you will need to get new certificates for each machine.
Good Connections: SecureFX and SecureCRT for Windows

Bill Brids

This spring, VanDyke Software released new versions of SecureFX and SecureCRT. SecureFX is a secure file transfer application for Windows XP that uses the SSH2 (Secure Shell) protocol to protect your data in transit between your machine and a server. SecureCRT, which also uses SSH2, is a terminal emulator that provides secure remote access.

Both applications are available to members of the MIT community at no charge (certificates required). The MIT installer versions of both programs are preconfigured to connect to Athena.

What SecureFX 3.1 Can Do For You

You can use SecureFX to upload and download files (e.g., web pages, images, software) to and from SFTP servers (Athena and others). SecureFX lets you remotely rename, move, delete, and change the permissions of files residing on these servers. It also lets you initiate a comparison between the contents of a local folder and a server folder: the results are displayed in the Synchronize window.

If you have an Athena account, SecureFX provides an easy, effective method for backing up local data to the one-gigabyte space reserved for you on Athena. Simply log into Athena and create a folder where you will save your file backups (e.g., Backup_MyDocs). You can then use SecureFX to drag files from your local machine to your backup folder on Athena.

New Features in SecureFX 3.1

The latest version of SecureFX is 3.1. It introduces a tabbed session feature, based on the tabbed browsing concept in the Firefox browser. This option lets you easily switch between multiple connections within one window.

You no longer have to drag and drop files from a SecureFX local window to the server window. Instead, you can drag and drop or copy and paste files directly from the Windows machine (e.g., from My Documents, Windows Desktop) to the server.

A new feature called the Activator lets you minimize specific sessions or all sessions to the system tray instead of the Windows task bar. This is useful if you make multiple connections to one or more servers, since it reduces taskbar clutter. The Activator also supports SSH agent functionality, so if SecureFX is closed, authentication will happen automatically provided that the Activator is still running.

SecureFX 3.1 offers sound notification options to let you know when a connection is made, when a transfer completes, or when there’s an error.

The new version also offers increased firewall flexibility by adding generic proxy, which supports both HTTPS and SSL proxies.

SecureFX supports the use of IPv6, a “next generation” Internet protocol. While IPv6 is not widely used at MIT at this time, you can find out more about it at http://www.ipv6.org/

Getting and Using SecureFX

To download the new version and get installation instructions, go to the SecureFX 3.1 for Windows page at http://itinfo.mit.edu/product.php?vid=694

For a quick-start guide on using SecureFX at MIT, see http://itinfo.mit.edu/article.php?id=6178

Security with SecureCRT

SecureCRT protects your terminal sessions when connecting to Athena via MITnet or an Internet service provider. You may opt for this application if you want to use the SSH2 protocol or if you are having trouble connecting securely to Athena with HostExplorer.

New Features in SecureCRT 5.1

The latest version of SecureCRT is 5.1. As with SecureFX, SecureCRT 5.1 offers tabbed sessions to reduce desktop and taskbar clutter and let you switch between multiple connections within one window. A new feature lets you open an SFTP tab to the same server without having to reauthenticate.

SecureCRT 5.1 also provides

- Named firewalls that allow session-specific firewall settings
- 256-color Xterm support
- Support for IPv6

Getting and Using SecureCRT

To download the new version and get installation instructions, go to the SecureCRT 5.1 for Windows page at http://itinfo.mit.edu/product.php?vid=696

For a quick-start guide on using SecureCRT at MIT, see http://itinfo.mit.edu/article.php?id=6175

A Word About Support

SecureFX and SecureCRT do not use Kerberos to authenticate connections, instead using the SSH2 protocol for security. SSH2 works well from behind the Network Address Translation (NAT) boxes commonly used in most home networks. MIT does not allow NAT boxes on the campus network, and while IS&T doesn’t offer support for home networking, it does provide SecureFX and SecureCRT to community members to ensure that they can connect securely regardless of their network setup.

For assistance with installing or using SecureFX or SecureCRT, contact the Computing Help Desk. You can reach a consultant at <computing-help@mit.edu> or 253-1101.

http://web.mit.edu/ist/istnews/  May / June 2006  is&T
IS&T Announces Plan to Retire Eudora Support in Favor of More Robust Email Applications

Information Services and Technology (IS&T) will retire support for the Eudora email application effective December 31, 2006, continuing an email migration process that began last January. In response to the community’s increasing preference for other email applications – and with the support of IT colleagues around campus – IS&T strongly endorses migrating from Eudora to Outlook 2003, Outlook Express, or Apple Mail. The recommended applications are more stable than Eudora, particularly on Windows, and come installed as part of Apple and Microsoft operating systems or office bundles. They have the added benefit of being able to take automatic updates and security fixes.

Eudora’s Shortcomings

Software bugs in QUALCOMM’s Eudora products have caused multiple problems in reading and sending email, including duplicate messages, crashes, and corrupt tables of contents. Unfortunately, QUALCOMM does not provide patches for the earlier versions of Eudora, instead requiring users to upgrade to the latest version to resolve the bugs. Since many users are reluctant to upgrade because of extensive user interface changes, they remain exposed to instabilities and potential security risks.

Making the Move

The Eudora user population at MIT has steadily decreased over the years. (Less than 15% of the MIT community is using Eudora.) For some time, IS&T has been placing less emphasis on Eudora while expanding its knowledge and support of Outlook 2003, Outlook Express, and Apple Mail.

Effective immediately, IS&T will no longer create custom Eudora installers or documentation. The Eudora installers on IS&T’s main software download site at http://web.mit.edu/software/ are scheduled to be archived by the end of June 2006, although they will be available for existing Eudora users for disaster recovery. IS&T currently does not have plans to retire the POP mail service that most Eudora users rely on for checking email.

From POP to IMAP

IS&T has already been working with other IT colleagues at MIT on another wave of migration: moving email services from the Post Office Protocol (POP) to the Internet Mail Access Protocol (IMAP). The older POP technology – standard for most Eudora users – is a basic store-and-forward mail handling system. When you connect to the mail server, your mail is downloaded to your machine (or home directory on Athena) and deleted from the server. In recent years, industry support for POP has declined significantly, to the point where it is almost nonexistent. This is especially true in the case of kPOP, the version of POP implemented at MIT.

The newer IMAP protocol uses a client-server approach, in which email is kept and managed on MIT’s central mail servers. IMAP provides several benefits to users – including the ability to access email from multiple machines and mobile devices, and full use of spam screening capabilities – while retaining the ability to store and manage mail locally on your machine.

The IS&T-recommended email applications are all based on IMAP; Apple, Microsoft, and Red Hat offer robust support for this protocol. MIT’s WebMail – which can be accessed from your web browser – also uses IMAP.

Support

IS&T provides several types of assistance to support community members and departments, labs, and centers in the email migration process. Offerings include Quick Start classes, online demonstrations and documentation, and Computing Help Desk and DITR services. For a complete list of services, visit the Email Migration at MIT page at http://web.mit.edu/ist/topics/email/migration.html

IS&T Launches Release Process for Windows Vista

Windows Vista is the long-anticipated replacement for Windows XP, which Microsoft announced will be available in November 2006. In response, IS&T has launched the Vista release effort, headed by Alex Kozlov. The release team will work with members of MIT’s IT community to evaluate the operating system, identify problems, form solutions, develop a support plan, and set community expectations.

Windows Vista is expected in as many as eight versions. MIT will focus on the Business version, which adds tablet PC functionality to the Professional version of Windows XP. During initial evaluation, the release team will establish a baseline of applications that function with Vista and follow up with vendors about plans for fixing problems. For more about these findings, see the Microsoft Vista Release Notebook at http://web.mit.edu/swrt/releases/vista/

In addition, the release team will work closely with MIT business process owners to establish plans for testing and supporting their business applications.

The second phase of the release effort will focus on communicating findings and recommendations to the MIT community before the release of Vista. IS&T anticipates recommending that users postpone upgrading to Vista until Microsoft releases the first service pack.

In the last phase, the release team will focus on training support providers across campus and revising documentation to include Vista; new overview materials will highlight key features and major changes to the operating system’s look and feel.

The entire MIT community, including all graduate students, will be eligible to download the Windows Vista Business edition through the Microsoft Campus Agreement. To learn more, see http://web.mit.edu/ist/services/software/msca.html

IS&T will follow Microsoft’s support plans and continue to support Windows XP Professional for about two years after the release of Windows Vista.
**Tips for Handling Sensitive Data**

- Tim McGovern

Many MIT faculty, students, and staff handle sensitive data on a routine basis. This data includes not only personal identifiers – such as birthdates, Social Security numbers, and home addresses – but also medical records, academic records (such as grades), salary information, and research data and other intellectual property.

Sensitive data is often stored in electronic format, which can make it more vulnerable to exposure. This article recommends some guidelines for handling this data more safely.

**Data Stewards and Distributed Data**

MIT collects and stores sensitive data in large central administrative systems – MITSIS, SAP HR, and the like. Departments, laboratories, and research centers (DLCs) may also record some of the centrally maintained data to support local decision-making and planning. The central administrative data stewards ensure that proper safeguards are in place for their data-bases. DLC staff must ensure that they have implemented corresponding safeguards. This includes both protection for data that is stored and protection for data that is being transmitted from one person or place to another.

**Protecting Stored Data**

When you include sensitive data in any electronic files (e.g., Word, Excel, FileMaker, Access), make sure that the computer on which those files are stored is configured to require a strong username/password. For better protection, you can also assign passwords for databases and spreadsheets.

If you store files that contain sensitive data on removable media such as flash drives, writable CDs, or DVDs, keep these in a secure location when not in use. Printed copies of sensitive data require the same level of protection.

It’s not a good idea to run web servers on any computer where sensitive data resides, particularly personal computers, as these tend to be more vulnerable to hacking than MIT’s enterprise systems.

**Protecting Transmitted Data**

When conducting Institute business, you may need to send sensitive data to another office. Most of MIT’s central administrative applications use encryption to protect data as it travels from your office to the central database. Use of Kerberos usernames and passwords or MIT certificates ensures that only authorized maintainers can make changes. Since MITnet and other networks are subject to interception by outsiders, sending sensitive data without encryption is strongly discouraged.

- Don’t send sensitive files as email attachments unless they are protected.
- Don’t discuss confidential and sensitive matters over mobile phones.
- Don’t fax sensitive documents unless you know that the receiving fax is secure (i.e., only appropriate individuals have access).
- Don’t use voice mail to convey sensitive information unless you know that the message is secure. To be on the safe side, request a call back when you need to provide sensitive data to others.

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**IS&T Revisits Course 15.568**

- Lee Ridgway

Last spring, the Sloan School’s class in Practical Information Technology Management teamed up with IS&T on three initiatives. Following that fruitful partnership, Jerry Grochow, VP for IS&T, and Prof. Benjamin Grososf, this year’s teacher for 15.568, agreed to do it again.

The premise behind 15.568 is to complement students’ knowledge of information technology (IT) by focusing on the organizational and people aspects of IT project management. Being tied to IS&T initiatives gives the students real-world experience in meetings, information gathering, analysis, and last-minute changes in scopes and objectives.

**The 15.568 Teams**

Looking at the MIT Events Calendar were students Katia Acosta, Victor Costan, Katherine Han, and Brandon Hong, with Suzana Lisanti as the IS&T sponsor. They found that the current web calendar does not include all campus events, is underused by students, and could be improved by adding delivery of event information by email and to PDAs.

Jason Carver, Mark Grimm, Albert Leung, and Jason Witzberger, with IS&T sponsor Oliver Thomas, studied how IS&T could improve its process for moving services and software from pilot to release. Using IS&T’s rollout of Jabber instant messaging as a case study, the team identified three areas for process improvement: more effective communication, developing a sense of continuity, and better coordination between groups.

Space is often an issue on campus, and delivering IT at MIT requires space for closets, wiring, and other equipment. Tanya Flores, Colin Klick, Gajan Rajanathan, and Rose Zhong, with Joanne Hallisey as IS&T sponsor, looked at incorporating space for IT in new building construction. Among the issues they validated were the importance of communication to resolve misunderstandings between groups and – more IT specific – the need to anticipate technologies, especially with regard to upgrades and expansion. The team detailed benefits of early IS&T integration into the building process, and created a list of physical IT requirements. It also suggested developing flexible strategies to deal with changing requirements.

**Communication Is Key**

Summing up the teams’ work, Jerry Grochow discerned a common theme: “the need for better communication, and its flip side, that we all suffer from communications overload.” Prof. Grososf added that “there’s always a challenge to get the degree of communication right.” In a way, these student teams are acting as a ‘third force’ to help IS&T do that.”

IS&T plans to use the findings from 15.568 to tackle the challenges it identified at the outset. The upcoming release of the Events Calendar will benefit, as will releases of IS&T services and software. And, with coordination, Facilities and IS&T will continue evolving their relationship to ensure that new MIT buildings have a robust technology infrastructure.
July 1 Marks “Go Live” of SAP Payroll System

• Diana Hughes

By now you’ve probably heard that the Institute is going live with the new SAP Payroll system on July 1, 2006. But you may be wondering what “go live” means. Essentially, the Payroll Office will stop using the current payroll system and begin using SAP to process all payroll transactions. The SAP Payroll system will offer faculty, DLC administrators, employees, and student employees several new electronic tools for payroll functions that are done today on paper.

Tab Dance
The Employee Self Service (ESS) web site will expand to offer several new features for employees. A new Time tab will let Support and Service staff and hourly paid students access and enter time sheets, review time sheet information, and request corrections to previously submitted and approved time sheets. The Time tab will be available starting Wednesday, July 5. To access the ESS time sheet entry application, Support and Service staff should go to the ESS web site at http://web.mit.edu/sapwebss/ and click on the Time tab. Hourly paid students should go to the WebSIS web site at http://student.mit.edu/ and click on Financial Information.

The Money Matters tab on ESS will offer two new applications.

• The Direct Deposit application, which replaces the paper Direct Deposit Form, lets you enter or change your bank account information for automatic deposit of your pay check into the account of your choice on payday.

• The Tax Withholding application, which replaces the paper Tax Withholding Form, lets you enter or change your State and Federal income tax withholding.

The new applications on the Money Matters tab will be available starting Sunday, July 2. To access the Direct Deposit and Tax Withholding applications, go to the ESS web site at http://web.mit.edu/sapwebss/ and click on the Money Matters tab.

The Employees tab on the SAP web site will also expand to offer several new features for administrators. A time administration application will let Time Administrators and Time Approvers review and approve time sheets, request or process time sheet corrections, and view time sheets that have been submitted. In addition, Distribution Reviewers will be able to review and adjust salary distribution information for employees in their organization.

The SAPweb time administration application will be available starting at 9am on Friday, June 30, to let Time Administrators and Time Approvers enter and approve time for Support and Service staff and hourly paid students. The Payroll Office, HR-Payroll Service Center, and Computing Help Desk will extend their business hours on June 30 from 9am to 7pm and on July 1 and 2 from 9am to 3pm to assist administrators entering and approving time. The deadline for entering and approving time for the week ending July 2 is Monday, July 3 at 2pm. To access the SAPweb time administration application, go to the SAPweb site at http://web.mit.edu/sapweb/ and click on the Employees tab.

The Employees tab on the SAPweb site is also where administrators and principle investigators will review and certify salary distribution using the eDACCA. The eDACCA, which replaces the paper DACCA, will let administrators and principle investigators review monthly and quarterly salary reports and certify quarterly reports to comply with MIT’s Financial Review and Control and Certification policies. In addition, administrators will be able to make salary distribution changes for weekly and monthly paid employees and hourly paid students using the electronic salary distribution system (eSDS) application. The eSDS application will replace the DINDI, SANDI, and eSANDI. The SAPweb eDACCA and eSDS applications will be available on Wednesday, July 5. To access them, go to the SAPweb site at http://web.mit.edu/sapweb/ and click on the Employees tab.

Training and Support
To help the community make a smooth transition to the new payroll system, an extensive curriculum of classes is being offered this summer, with refresher classes in the fall. For class descriptions and details about schedule, location, seating availability, and registration requirements, go to the ESS web site at http://web.mit.edu/sapweb/ and click on the Training tab.

If you have a question but aren’t sure who to contact, call the HR-Payroll Hotline at (617) 253-4255 between 8:30 am and 5pm. A representative from the HR-Payroll Service Center will answer your question or direct your call to the appropriate resource for resolution.

For help using ESS or SAPweb applications, contact the Computing Help Desk at <computing-help@mit.edu> or 253-1101.

UserDocs

UserDocs at http://userdocs.mit.edu/ is a new web site that provides the MIT community with direct access to end-user documentation and resources. It is organized by business area, giving you access to the information and how-to steps needed to perform your work effectively. UserDocs includes:

• HR-Payroll Resources: Provides the community with documentation and resources on the new electronic tools.

• SAP for MIT Documentation: Provides financial administrative staff with instructions for using SAP along with corresponding MIT business rules.

• UserDocs for Central Administration: Provides staff in central administrative offices with documentation on the SAPgui HR-Payroll application.
Connecting from Off Campus
This Summer? Prepare and Test!

• Nate Herzog and Joanne Larrabee

Does your summer schedule involve vacation or travel that requires you to have remote computer access to MIT? If you plan to work from home or other off-campus locations this summer, now is the time to make sure your computer is up to the task. IS&T strongly encourages you to test your Internet connection and any MIT network resources you use before you begin working remotely.

MITnet resources include
• Sending and receiving email
• Electronic timecards and payroll services
• Frequently accessed MIT web pages
• Your calendar, especially if you use MIT TechTime
• File transfer to Athena or other file servers on campus
• Athena dialup or terminal connections; Tether

If there are other computing tasks you do routinely from your MIT office, try them off campus before you need to perform them remotely with a pressing deadline.

You’ll want to be sure that you’ve renewed both MIT site and personal certificates for any web browser you use. You’ll need certificates to access secure web services on campus, such as Payroll, SAPweb, or ECAT. For details about web certificates, see “It’s Time to Renew MIT Web Certificates” on page 2. You can test certificates by visiting the certificate test page at http://web.mit.edu/consult/www/certificates/

High-Speed Options from Home
You should be able to access most of MIT’s network resources via any Internet service provider (ISP). However, some network connections have been problematic from home.

IS&T encourages you to use MIT’s Virtual Private Network (VPN) service when you work off campus. VPN creates a private connection to MITnet and assigns your home computer an internal MIT network address. This reduces the likelihood of encountering problems when accessing MIT network resources.

You can download VPN for different platforms at http://itinfo.mit.edu/product.php?name=vpn

Install and test the VPN connection with the MIT network resources you use before you start working from home.

To obtain high-speed Internet access, contact your local phone or cable provider. Before you do, you may want to review IS&T’s advice regarding high-speed remote access at http://web.mit.edu/ist/services/network/remoteaccess.html

Configuring high-speed access may require some troubleshooting after the initial installation. Consult with your local provider to ensure that your connection can be installed and tested in time for your off-campus plans.

Dial-up to MIT from the 617 Area Code
MIT provides Tether, a modem dial-up connection service, for those living in the Boston area who need to connect to the Internet. This service costs $10/month and is available to faculty, staff, and students. You can sign up for a Tether account online. Note that all new Tether account requests take 48 hours to process. For information about configuration and use, see the Tether Service at MIT page at http://web.mit.edu/ist/services/network/tether.html

Older, noisy phone lines can make modem connections unreliable, slow, or may even prevent the modem from connecting. IS&T strongly encourages you to try accessing MIT network resources via your Tether connection well in advance. If Tether disconnects frequently, setting your modem at a slower connection speed may increase reliability.

Dial-up to MIT Outside of the 617 Area Code
MIT provides iPass, a fee-based remote access service that can connect your computer to MITnet through a dial-up number local to your area. It may also work through some commercial wireless access points. iPass is available for MIT faculty and staff, but not students. You can sign up for an account at the iPass account sign-up page (certificate required). New iPass accounts process immediately upon registering. iPass is billed on a per-call basis. For information about getting and using iPass, and iPass rates, go to the iPass-Connect at MIT page at http://itinfo.mit.edu/product.php?name=ipass

IS&T strongly encourages you to test using MIT network resources via iPass before you start working remotely. You may want to visit a local wireless access location, rather than waiting until you’re in an airport or other distant location to find out whether the service works for you.

Software
Make sure that your home computer or laptop has all the software you need for your work. You can obtain some software online at the MIT Software Distribution site at http://web.mit.edu/software/

If you need applications not listed on these web pages, such as Microsoft Office or FileMaker, you may need to buy these separately. Be sure to obtain software in advance so you have time to install and test it.

Backup
Portable computer equipment is vulnerable to loss or damage when you travel. Consider the consequences of the loss of some or all of the files on your computer. The TSM backup service can be configured to work remotely, although it will proceed more slowly than over a high-speed campus network connection. Consider buying a compact USB flash drive or other portable storage to copy and carry files that are most critical when you are on the road.

If you will be using a different email system than the one you usually rely on, don’t forget to have a copy of your email address book available. Also, consider sending a copy of outgoing mail to your MIT email address so that no matter what email program you use, you will have a copy for your records.

Questions?
If you encounter problems when testing your off-campus setup, work with the Computing Help Desk to resolve them. You can contact the Help Desk at <computing-help@mit.edu> or 253-1101. Do this as far in advance as you can, so that your experience with remote access is a productive one.
As the article on eLens suggests, applications with location awareness are starting to change how we interact with the world. Whether you want to view a subway map on your PDA, learn the history of a building, or listen to restaurant reviews as you walk down a street, location-aware applications are extending the reach of the Web.

One bold example of this is Semapedia, the Physical Wikipedia, at http://www.semapedia.org/

It aims to “connect the virtual and physical world by bringing the best information from the Internet to the relevant place in physical space.” Other location-savvy sites are listed on the right.

### Surf Sites: Location Location Location

- **Google Earth**
  - http://earth.google.com/
- **iSubwayMaps**
  - http://www.isubwaymaps.com/
- **MetaCarta**
  - http://www.metacarta.com/
- **Plazes**
  - http://www.plazes.com/
- **Senseable City**
  - http://senseable.mit.edu/
- **Socialight**
  - http://socialight.com/

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**For help with…** | **Dial…** | **Or send a message to…**
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General computing questions | 253-1101 | computing-help@mit.edu
  - Macintosh, Windows, network/ connectivity, business applications, computer buying advice
Academic computing | 253-0115 | et-consult@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

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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 the Request Tracker link on the Getting Help page at http://web.mit.edu/ist/help/