



News about information systems throughout MIT

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Wireless World Without End: The Future According to Me++

• Lee Ridgway

Me++: *The Cyborg Self and the Networked City*, published by The MIT Press, is the latest book by William Mitchell, Academic Head of the Program in Media Arts and Sciences, and former Dean of the School of Architecture and Planning. Following on *Me++*'s predecessors, *City of Bits* (1995) and *e-topia* (1999), Mitchell considers the state of our networked, electronic, wireless world – the digital present – and where we might be headed in the future.

An Early Start in Wellfleet

In the Prologue, Mitchell recounts a historical moment which he pegs as the beginning of the wireless era: January 18, 1903, when Marconi first transmitted a telegraph message across the Atlantic from Wellfleet, on Cape Cod. Marconi needed four 210-foot towers and a 20,000-volt power generator driven by a kerosene engine to push a very brief message into the ether and across the ocean. One-hundred years later we can stand on that same spot and hold in our hand a small, battery-driven device, orders of magnitude more powerful than Marconi's apparatus, which lets us communicate in several different formats with others just about anywhere in the world, as well as with satellites above it.

The Premise and the Promise

If there is one overall premise to *Me++*, it is that, with the continuing advances in shrinking size, increasing power, and wireless connectivity, "nothing need be without processing power and nothing need be left unlinked." Mitchell explores the ramifications of this statement in twelve chapters relating numerous permutations of the intersection between computers and humans. In fact, Mitchell attempts to be all-encompassing by examining "the interwoven implications of wireless linkage, ubiquitous and global-scale interconnection, miniaturization and portability, mobilized bits, and associated systems and practices for our bodies, our clothing, our architecture, our cities, our patterns and systems of movement, and our uses of space and time."

A tall order! Mitchell's approach is to take some aspect of our human body or our surroundings and trace developments that lead to a conjunction or connection with technology. To illustrate his point and build his metaphors and analogies, Mitchell touches on literature, history, anthropology, sociology, science, and engineering.

For example, in the chapter "Connecting Creatures," Mitchell starts with the human body's network of muscles, skeleton, nerves, and organs, which our inventions have, over time, augmented, expanded, and extended. We harnessed the power of animals to give us extra

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muscle power and mobility, which led to roads and vehicles. Then came the industrial era with steam power and combustion engines, then electricity, right up to computer programming, remote control, robots, and digital networks. We are now able to copy and distribute programs to multiple devices in different locations, thereby multiplying and extending our physical control through space and time. It's sort of like saying our reach now extends well beyond our grasp.

In the chapter "Electronic Mnemotechnics," Mitchell's starting point is a message that gets its meaning from its context in time and space, which, in turn, may impose conditions on how the message is relayed and by what technology. From here we move to the wireless world where a message can also have locational relevance through tracking. For Mitchell this poses the possibility of weaving together a geographic area, the people in it, and digital information. As one example, physical stop signs at intersections might be replaced by a virtual stop sign that would be relayed wirelessly and

projected onto your vehicle's dashboard or windshield – if traffic conditions warrant it.

From this, Mitchell moves on to location tracking, the global positioning system (GPS), indoor navigational beacons as standard architectural features, transponders for inventory control in a warehouse or your refrigerator, and urban information overlays to help us get around and find out about cities and things in them. This is a world where everything (and everyone?) has an embedded processor, and everything is interconnected, blurring the lines between physical space and cyberspace.

Much of what Mitchell covers in *Me++* is going to be familiar to even the casual user of technology or to the follower of technology coverage in the news media. To take just one example: cell phones. So commonplace that they are taken for granted, cell phones can now be multimedia devices. The possible combination of phone, camera, GPS receiver, bar-code scanner, laptop computer, and clock can put us at the center of the worldwide network wherever we are, and let us do things that only a few years ago required a table full of devices.

After all of the technological detail in *Me++*, Mitchell's Epilogue may

contain the most thought-provoking material. Here he begins to tie together technology and community, and how they relate to reciprocity, ethics, and responsibility, or what Mitchell calls networks of mutual obligation. He lays out how our human groupings – family, social, community – have changed over history, from being isolated and location-specific; to encompassing broader geographic areas; to embracing electronic connectivity where borders count for nothing. He traces how these changes have affected how humans act and react with one another, whether with fear and force or with cooperation and a sense of mutual obligation.

In the end, he sees the infrastructures supporting our global connections as still being based in physical, geographic locations, but "spatially discontinuous, overlapping, and intersecting," defined not by borders or boundaries, "but by the endless hum of electromagnetic vibrations."

Author Appearance

William Mitchell will speak about *Me++* as part of the authors@mit series sponsored by the MIT Press Bookstore. The talk will take place in the Bartos Theater in the MIT Media Lab Building on November 13 at 5:30 pm. ☉

Change in Practice for Executable E-Mail Attachments

Starting October 27, the MIT mail system will no longer distribute e-mail attachments that self-execute on receipt. This change in policy is necessitated by the growing trend to exploit operating system and application security flaws through the active distribution of such attachments. Executable e-mail attachments carrying worms and viruses tend to be destructive and fast moving, with considerable impact on Institute resources and productivity. The distribution of non-executable e-mail attachments, such as Word documents, Excel spreadsheets, and PowerPoint presentations, will continue uninterrupted.

The "Mail Hub Attachment Filtering" web page at

<http://web.mit.edu/services/mail/attachments.html>

highlights helpful information, including a list of executable extensions that will be filtered.

Colleagues who need to exchange executable files should consider alternatives, such as the file transfer protocol (FTP). IS supports several secure FTP options. For more information, see

<http://web.mit.edu/is/topics/filetransfer/>

In future, any executable files to be exchanged through the MIT mail system will first need to be packaged (by zip, tar, etc.).

IS's decision to reject e-mail with executable attachments has been made after careful consideration, and is in line with industry practices. E-mail rejected because of an executable attachment will not be delivered, and a note will be returned to the sender acknowledging that his or her e-mail was not delivered due to MIT's e-mail operating policy. IS hopes that by putting this practice in place now, the MIT community will have adequate time to adapt to this change and not be required to make the transition during a virus or worm outbreak. ☉



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BrioQuery 6: Sleeker Look, More Power

• Phyllis Galt

BrioQuery is the recommended query and reporting tool for accessing MIT's Data Warehouse. Version 6 is now available to the MIT community and comes with a new look and feel and some impressive new features.

BrioQuery 5.5 users will be glad to know that they can use their files in version 6. However, BrioQuery 6 files cannot be opened in BrioQuery 5.5.

Multi-paned Look and Feel

Those familiar with BrioQuery 5.5 will find that version 6 looks quite different. The workspace is now a multi-paned window:

- The section tabs have been moved into a section pane that appears on the left side of the workspace.
- The table catalog is now in a catalog pane, below the section pane, rather than a free-floating window.
- The items in the catalog pane change depending on which section is active (e.g., in the Results section, it's a list of the Request items).
- The panes can be resized and turned off and on.
- The Pivot, Report, and Chart Outliners are now in a pane at the bottom of the window. Also, an Outliner has been added to the Results section, replacing the Request line. You can pull out any Outliner as a free-floating pane; however, if you navigate to another section, the Outliner won't reflect this. The header and footer switches in BrioQuery 5.5 are accessible only via context-sensitive menus in BrioQuery 6.
- Links appear at the top of the Section title bar for turning off and on the display of the Outliner, Sort, and Limit lines.
- Blank Pivot, Chart, and Report sections are not available by default in a new BrioQuery file; you need to create them, as needed, by going to the **Insert** menu.

New Features

BrioQuery 6 lets you process multiple queries within one file, as well as

The screenshot shows the BrioQuery Pivot2 window with a table of financial data. The table has columns for Amount, Description, and another Amount. The data is as follows:

Amount	Description	Amount
15.00	Salaries & Benefits	(48.88)
21.00	Operating Expenses	49,737.39
29.00	Equipment	1,071.65
46.00	Student Revenue	(600.00)
48.00	Fees/Services-External	(278.87)

The interface also shows a 'Sections' pane on the left with 'Detail Transaction Re...' selected, and a 'Results' pane at the bottom with 'Side Labels: Level4 Sort' and 'Level4 Category' visible.

Example of Pivot using Detail Transaction data

query more than one database. This opens up myriad possibilities for advanced users who need to combine data from multiple sources.

A new Tables section has more features for displaying and printing tabular data. It is especially useful if you want to export just a subset of data into Excel. After creating a table, you specify the items you want to include, then export.

BrioQuery 6 uses JavaScript to create and modify computed items rather than a BrioQuery script. If you convert version 5.5 reports for use in BrioQuery 6, you will need to rebuild certain computed items such as averages and percentages.

The biggest change for 5.5 users is that the Detail Report has been replaced by the Report Designer, which you use to create what are called just "Reports." Features of the Report Designer are:

- The default look for reports is more grid-like, with white text on blue for column headings.
- The Outliner is divided into three sections as before, but with new names:
 - The *Report Group* replaces the Document area.
 - *Table dimensions* replaces the label section of the Body area.
 - *Table facts* replaces the data values section of the Body area, i.e., where you place items for which you want a total.

- Rulers, section boundaries, grid lines, and zooming are available to fine-tune your report. A Page Layout mode lets you view report pagination, margins, headers, and footers.

Print Preview is not included in the Report Designer. By default, what the Report Designer displays in Page View directly represents what will print. Reports are not scalable for printing.

If you want to use version 5.5 Detail Reports in 6, BrioQuery will display them and populate them with data when you process the query. If you want to use the full range of Report Designer features, you will need to use the **Convert to Report** command.

Support

You can get the BrioQuery installer from the MIT Software Distribution page at

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

Certificates are required for download.

IS is offering a new suite of BrioQuery 6 hands-on classes, including *BrioQuery 6: New Features*. For a complete list of classes, go to the IS Training web site at

<http://training.mit.edu/tr?groupid=1>

For assistance with BrioQuery and using it to access the Data Warehouse, contact the Business Liaison Team at <business-help@mit.edu> or 253-1177.

For detailed information about the Data Warehouse – what's in it, how to get authorized to use it, and a list of MIT standard report templates – go to

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



Revisiting WebMail: This Popular Service Gets a Boost

• Jag Patel

Many members of the community rely on MIT WebMail when they travel. This e-mail service from IS provides a convenient way to read, reply to, send, and delete current e-mail using almost any web browser, almost anywhere in the world. Access to the MIT e-mail servers is secure and encrypted.

Released in the spring of 2002, MIT WebMail has proved so popular that IS recently added a second server. In addition to this performance boost, the MIT WebMail user interface will be updated this fall to incorporate the new MIT graphic identity and provide a lighter color scheme that will display well across multiple computing platforms.

Accessing WebMail/Requirements

You can access MIT's WebMail installation from

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

This page provides links to instructions and a FAQ.

To access your e-mail using MIT WebMail, you need:

- A web browser that supports SSL encryption and has JavaScript enabled (e.g., Netscape, Internet Explorer).
- Your MIT Kerberos username and password (the same ones you use for your Athena, Eudora e-mail, or MITnet account).
- Your incoming mail delivered to a central, IS-supported post office server. The mail must be addressed to <user@mit.edu> (not <user@sloan.mit.edu> or <user@yahoo.com>),

and your @mit.edu e-mail account must not be forwarded to another address.

- An MIT CA certificate installed in the browser (you will be prompted for installation, if necessary). **Note:** If the browser is on something like a kiosk that provides limited web access, it may not be configured to allow this. Without the MIT CA certificate, you won't be able to connect to the MIT WebMail servers.

An MIT personal certificate is *not* required to use WebMail.

WebMail's Limits

MIT WebMail provides desktop-independent access to e-mail stored on an IS post office server. However, WebMail is not a full-featured e-mail product, such as Eudora. IS does not recommend WebMail as a replacement for a desktop-based e-mail client.

WebMail is not intended for long-term, archival handling of your e-mail, because it only allows for manipulation of e-mail while it is on the IS post office server. WebMail doesn't provide an easy way to move your e-mail from the post office server to your local computer or Athena home directory, or any other place you store e-mail. The messages and folders you see in WebMail are stored on the post office server until you delete and purge them. Quotas are enforced on the IS post office servers, so you should use an MIT-supported e-mail client, such as Eudora, for long-term management of your e-mail.

Support

If you have questions about MIT WebMail, contact the Computing Help Desk at <computing-help@mit.edu> or 253-1101. ☺

IS Releases Eudora 5.2.x for Windows and Macintosh

IS recently released Eudora 5.2.1 for Windows and 5.2.3 for Mac OS X and Mac OS 9. This latest version of Eudora makes significant improvements to IMAP functionality. It also incorporates Kerberos V authentication for both incoming and outgoing messages. **Note:** IS is looking into requiring authentication for outgoing messages to reduce the spam relayed through MIT. Older versions of Eudora don't possess this capability. The recent MIT releases of Eudora have been preconfigured for SMTP authentication.

You can get the Eudora installer for your platform from the MIT Software Distribution site at <http://web.mit.edu/software/>. This site also has links to online documentation, including installation instructions.



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

Software and Operating Systems Slated for Desupport

To ensure a high level of support at MIT for the Macintosh and Windows platforms, Information Systems recently reviewed the software for which it currently offers assistance. IS does this periodically with the goal of determining which software to "retire," a process that is vital to improving responsiveness to new vendor releases and introducing new software offerings.

As a result of this review, IS will discontinue support for selected applications – such as Dreamweaver 4.0 and BrioQuery 5.5 – on December 31, 2003. For the full list, go to

<http://web.mit.edu/swrt/announcements/de-support-fy04.html>

In addition, IS will desupport Mac OS 9 on June 30, 2004 and Windows 2000 Professional on December 31, 2004.

More on OS Desupport

Mac OS 9 (all versions). Apple has been steadily diminishing its support for Mac OS 9 since the release of Mac OS X in March 2001. Starting January 1, 2003, newer machines from Apple were not capable of running Mac OS 9 as the primary operating system. At this point, most vendors developing products for the Macintosh are providing only Mac OS X versions of their software. IS recommends that everyone migrate to some version of Mac OS X by June 2004. IS will make additional recommendations about upgrading to Mac OS X, including which version, well before June.

Windows 2000 Professional. Mainstream support from Microsoft will end on March 31, 2005. IS will discontinue support for Windows 2000 Professional on December 31, 2004 and will provide more guidance in upgrading from Windows 2000 Professional before December 2004.

Desupporting this OS requires adequate planning, resources, and lead time. IS is prepared to work with the MIT community to help ease the difficulties in migrating to a more current environment. ☺



Apple Updates PowerBooks

• Al Willis

Apple has unveiled the 15-inch PowerBook G4, the long-awaited successor to the Titanium PowerBook G4. Apple has also released updated versions of the 12- and 17-inch PowerBooks that were introduced in January.

These PowerBooks are only bootable in Mac OS X. However, they can run Mac OS 9 programs in Mac OS X's Classic environment.

The Newest PowerBook

Like other laptops in the PowerBook line, the 15-inch PowerBook G4 is made of anodized aluminum. RAM is now 2GB – double the amount the previous model could handle. The graphics processor is much improved: it's an ATI Mobility Radeon 9600 with 64MB of Double Data Rate (DDR) RAM. Screen resolution is 1280 x 854 pixels.

The new PowerBook has a DVI port for connecting to external displays or

projectors; with a DVI-to-ADC adapter, you can connect it to an Apple flat-panel display. The S-video port provides connectivity with TVs and VCRs.

The 15-inch PowerBook has a built-in Gigabit Ethernet port and a slot for an AirPort Extreme card. The latter supports Wi-Fi using the 802.11g standard (compatible with the widely deployed 802.11b networks). There's a 56K V.92 modem for dialup, and built-in support for Bluetooth, a short-range wireless standard for linking with PDAs, printers, cellular phones, and the like.

Expansion has been enhanced. The 15-inch PowerBook has two FireWire ports – one supports FireWire 400 and the other FireWire 800. The two USB 2.0 ports are backwards compatible to USB 1.1 devices such as keyboards, mice, and printers.

Apple offers two models of its 15-inch laptop. One has a 1GHz PowerPC G4 processor, 256MB of RAM, and a 60 GB hard drive. Educational pricing through the Apple Store is \$1799. The other comes with a 1.25GHz PowerPC

G4 processor, 512MB of RAM, an 80GB hard drive, an AirPort Extreme Card, and a SuperDrive. It costs \$2299.

The 1.25GHz model has a backlit keyboard that adjusts keyboard illumination and screen brightness based on available ambient light. This is a build-to-order option for the 1GHz model.

Updated Models

The updated 12-inch PowerBook G4 clocks in at 1GHz and can accept up to 1.25GB of RAM. Perhaps the most welcome new feature is the mini-DVI port, which lets you connect an external display. The combo drive model is priced at \$1399; the SuperDrive model at \$1599.

The updated 17-inch model gets a boost to 1.33MHz and an increase in total RAM to 2GB. It ships with an 80GB hard drive and sells for \$2699.



Support

For presales support in choosing a laptop, contact the MIT Computer Connection at

253-7686 or <mcc@mit.edu>. ☎

Citrix in Place for Macintosh Users of Enterprise Services

Information Systems recently rolled out a Citrix service, based on a technology that enables the execution of Microsoft Windows applications within a virtual desktop environment. IS is making this product available to the MIT community to enable support for several enterprise-wide applications that lack native Mac OS X support.

The applications available through this new service and their business process owners are listed in the box to the right. Application-level access and authorization processes to these business applications remain unchanged.

IT colleagues who support or plan to support Mac OS X in their departments may wish to familiarize themselves with this new service.

Getting Citrix

To access MIT's Citrix service, you need an account. The account activation process is simple, similar to that for iPASS and TechTime. To activate a Citrix account, go to the secure site at

<http://citrix.mit.edu/register>

Once you have an account, you can access Citrix through a supported web browser (certificates required) at

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

From this web site, you can download the desktop application and access any of the applications listed below.

Kerberos Is Key

MIT's Citrix service is provided via Windows 2000 member servers in the IS centrally managed Windows 2000 domain, "win.mit.edu," and relies on the vendor's implementation of Kerberos. It is critical that users' passwords have been set within the past two-and-a-half years in MIT's key distribution center

(KDC) servers. Users can reset passwords through the "change password" feature in Kerberos Utilities.

Support

Business process owners continue to be responsible for application support and maintenance, coordination, community announcements, and outreach. The Business Liaison Team (BLT) will assist with any initial requests and escalate problems as necessary to the appropriate business process owners.

If you have questions or concerns about MIT's Citrix service, contact the BLT at <business-help@mit.edu> or 252-1177. ☎

Application	Business Process Owners
Adonis	Resource Development
BrioQuery	Information Systems
Coeus	Office of Sponsored Programs
Graduate Admissions	Student Services Information Technology team
MITID	Information Systems
Roles	Information Systems
SAPgui with IXOS support	Controller's Accounting Office, Financial Systems Services, Information Systems



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

<http://itinfo.mit.edu/answers/>

Q I spent a long time composing a message in MIT WebMail, and it was lost when I tried to send it. What happened?

A Your session timed out. The WebMail server maintains a “session” with your browser, but the session eventually times out if WebMail detects no activity between the browser and the server. When you are composing or reading a message, you are interacting only with your browser, not the WebMail server. If this takes more than several minutes, the session will time out automatically. WebMail does this to conserve resources on the server, and also as a security measure in case you forget to log out on a public-use machine.

To prevent your session from timing out, especially when you are composing mail messages, display your INBOX in the main WebMail window. The INBOX is refreshed automatically every few minutes, which has the effect of keeping your session active.

Another option is to compose your e-mail message in the text editor provided by the operating system:

Windows = Notepad
Mac OS 9 = SimpleText
Mac OS X = TextEdit

When you finish composing your message, cut and paste it into your WebMail message. This way, you can make sure that your message is exactly the way you want it without worrying about WebMail timing out on you. If you use a word processor like Microsoft Word, be aware that the message may lose its formatting when you cut and paste it. Your text editor should copy and paste the message exactly the way you want it to. ☺

Use WebMail to Troubleshoot E-mail Problems

If you use Eudora, MIT WebMail provides a great way to troubleshoot e-mail problems. For example, if you find you can't send e-mail messages, try sending them in WebMail. If WebMail works but Eudora doesn't, then the problem most likely lies in Eudora and not your e-mail account.

Likewise, if you think you have e-mail but Eudora says you don't, use WebMail to check your messages. If WebMail shows that you don't have any new messages, it confirms that you really don't and that Eudora isn't broken.

If you have Eudora problems that you can't solve, contact the Computing Help Desk at [<computing-help@mit.edu>](mailto:computing-help@mit.edu) or 253-1101.

Technical Help Around the Clock: IT Books Online

• Tracy Gabridge

Are your bookshelves full of information technology (IT) books that have already become outdated? Then welcome to a reference shelf where the dust never settles. Courtesy of two subscriptions from the MIT Libraries, members of the community now have quick, 24-hour online access to the latest IT books. Safari Tech Books Online and Books24x7 are excellent online sources for IT and other technical and business books. They offer books on databases, web design, programming languages, operating systems, networking, security, some business topics, and more. Both are accessible from off-campus with MIT certificates.

Safari

Safari Tech Books Online at

<http://libraries.mit.edu/get/safari> contains the popular O'Reilly books, such as the Definitive Guides, Essentials, and In a Nutshell series. At press

time, the database included 327 books. Safari offers interesting search and retrieval options such as searching



within a specific book, searching the contents of all books at once, or searching for code fragments. Navigation is simple with multiple options for cruising through content,

including table of contents, an interactive index, hyperlinked text, and side navigation bars. Reviews are available to help evaluate each book.

Books24x7
Books24x7 at

<http://libraries.mit.edu/get/books24x7>

contains more than 2,800 electronic books from over 100 publishers, covering many technical disciplines and business reference books.

Books24x7 offers many of the same search, retrieval, and navigation features as Safari, but also lets you personalize your experience when you

register as a member. Through your account, you can set up a bookshelf. You can also add bookmarks within books to remember key places, annotate these bookmarks, and share them with other members. Books24x7 has a service to notify you by e-mail when new books come in.

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<http://libraries.mit.edu/barton>

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These two subscriptions are just the tip of the iceberg of the e-book collections available to the MIT community. Go to

<http://libraries.mit.edu/guides/types/ebooks/>

to see a listing and summary of other excellent collections for technical reference works, works of literature, language dictionaries, medical reference books, and much more! ☺

HR-Payroll Project Delivers SAP HR Module, Forms, and Tools

• Diana Hughes

In early September, Financial Systems Services' HR-Payroll Project team and HR staff implemented the Human Resources (HR) module of SAP. With this change the HR department on campus stopped using its former information system, Cyborg, and began using SAP for all HR transactions. This HR "Go-Live" is an important milestone in the comprehensive SAP project, which includes Lincoln Laboratory. Lincoln Laboratory introduced the HR module in May, and staff there are working toward implementing the entire SAP suite.

HR-Payroll Service Center

The HR-Payroll Service Center in E19-429 opened for business in coordination with the HR "Go-Live." The Center is staffed by employees from both HR and Payroll who are responsible for timely and accurate data entry and processing of HR transactions.

Each representative is assigned to specific customer areas, and can handle every type of transaction. Center representatives attended intensive hands-on training over the summer to prepare for the transition to SAP.

HR Online Forms

At the same time as the implementation of the SAP HR module, department, lab, and center (DLC) administrators began using new and revised forms to submit employment transactions to HR. A Forms team worked over the past year to design forms that provide consistency in data entry source documents and capture discrete employment transactions and reasons/descriptions that map to the SAP data entry screens.

The team revised the non-academic HTML forms to include some new SAP data requirements and, where possible, reflect recommendations made by the Business Process Redesign (BPR) team.

One example of a BPR recommendation is an enhancement to the revised Termination Form. The BPR team recommended that DLC administrators be provided with a checklist of tasks that need to be completed when an individual terminates employment. The Forms team collaborated with the Business Liaison Team (BLT), Parking Office, Travel Office, and others in designing an authorization/access removal page for the Termination Form. Once an administrator submits a Ter-

mination Form, a second page appears and creates a separate e-mail that's sent to these areas to remove SAP authorizations and access to various systems on the day after the termination date.



Academic forms were formatted in Excel rather than HTML to make it easy for users to save and print their forms. After the new academic forms were launched, some users reported that they were unable to access certain fields. It was discovered that the drop-down boxes, radio buttons, and checkboxes in the forms used an underlying, PC-only technology called ActiveX. During testing performed before the HR "Go-Live," it was thought that the issue might be machine-specific and dependent on platform, browser, and version of Excel. As a result, the plan was to provide local support when the issue surfaced. When it became clear that the issue impacted all Macintosh users, the academic forms were revised to eliminate their reliance on ActiveX controls. This was done within three weeks of the initial release.

You can access the revised forms from the HR web site at

http://web.mit.edu/hr/manager_forms.html

Technical support for HR's online forms is provided by the BLT and the HR Information Systems staff.

Data Warehouse

Approximately 400 members of the MIT community have been given some level of access (full, limited, department directory) to the new SAP HR BrioQuery reports in the Data Warehouse.

Some of the standard SAP HR reports that authorized administrators have access to through the Data Warehouse include

- Positions
- Expired/Expiring Appointments
- New Hire Review
- Transfers, Retirements, and Terminations.

There are also several standard reports available to authorized users for retrieving historical HR data from the Cyborg system (transactions prior to September 2003).

New Employee Self-Service Tools

On October 1, HR introduced three new employee self-service (ESS) tools that allow campus employees to manage more of their personal information online. By logging on to

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

eligible faculty and staff can review, update, and/or enter

- Emergency contact information
- Ethnic origin/military/veteran information
- Educational background, including school(s) attended, degree(s) awarded, field(s) of study, and completion dates.

These three new ESS tools underwent extensive usability testing to ensure ease of use, including accessibility for persons with disabilities. The tests, conducted by the IS Usability Team and the ATIC Lab, resulted in several improvements. For example, testers wanted more of an explanation on the data required for Veteran and Military status. Definitions of the field values for both are now provided.

Support

The BLT provides technical assistance for HR forms, ESS, the Data Warehouse, authorizations, and certificates. You can reach BLT staff at <business-help@mit.edu> or 252-1177. ☎

Quick Stats on the HR "Go-Live" Effort

- The HR "Go-Live" Effort involved converting
 - data for 16,460 people
 - approximately 320,000 HR records from Cyborg to SAP (achieved with a minimal error rate)
 - about 15,000 HR records from the Lincoln Laboratory SAP system.
- In the first nine days of operation, the HR-Payroll Service Center completed 983 transactions, 323 of which were Broad Institute new hires.



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

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

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

For help with...

Dial...

Or send a message to...

General computing questions (Macintosh, Windows, and network/connectivity)	253-1101	computing-help@mit.edu
Administrative applications	252-1177	business-help@mit.edu
Athena Computing Environment	253-4435	olc@mit.edu
Computer and printer repairs	253-0815	pcservice@mit.edu
Computer pre-sales consulting	253-7686	mcc@mit.edu
Disabilities and computing	253-7808	atic@mit.edu
Telephone repairs	253-4357	3help@mit.edu
Unix (by subscription)	253-1103	unix-vms-help@mit.edu
Voice mail	253-3677	3help@mit.edu



Surf Sites: Future Bits

William Mitchell's *Me++* (see lead article) focuses on the theme of interconnectedness in a digital, wireless world. There are several projects and consortia at MIT working to usher in an era "where nothing need be left unlinked." These initiatives range from wearable computing to an electronically mediated home. For a sampling, visit the web sites highlighted on the right.

- AgeLab
<http://web.mit.edu/agelab/>
- Counter Intelligence
<http://www.media.mit.edu/ci/>
- MIT Home of the Future
http://architecture.mit.edu/house_n/
- MIT Project Oxygen – Pervasive, Human-Centered Computing
<http://oxygen.lcs.mit.edu/>
- MIT Touch Lab
<http://touchlab.mit.edu/>
- Viral Communications
<http://dl.media.mit.edu/viral/>
- Wearable Computing at the MIT Media Lab
<http://www.media.mit.edu/wearables/>



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