News about information systems throughout MIT

i/s

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The MIT Press Ventures into E-Journal Publishing

Lee Ridgway
Publication Services

On June 30, 1995, the *Chicago Journal of Theoretical Computer Science* (*CJTCS*) published its first article. Nothing remarkable about that, given that new scholarly journals appear with some frequency. The difference here is that the *CJTCS* is an electronic refereed journal, available in an Internet archive, not published on paper. Supported by a grant from the Andrew W. Mellon Foundation, *CJTCS* marks the entrance of The MIT Press into electronic journal (e-journal) publication.

In a recent interview, Janet Fisher, Associate Director for Journals at The MIT Press, spoke of the Press's venture into e-journals: why it was undertaken, the experience so far, the possibilities, and the problems.

The Impetus to Move Online

In the case of scholarly journals, the push for electronic publication comes from several directions. Technology offers the means for complete electronic publication and distribution, in formats fully compatible with the specialized requirements of many technical and scientific fields.

Publishers are seeing rapidly increasing costs of producing and distributing print publications, and these increases are being passed on to subscribers. Universities, libraries, and researchers, facing increased subscription and maintenance costs, see electronic publications as more economical alternatives to print publications.

Finally, e-journals offer much faster turnaround than print publications. Articles can be published as soon as the review process is completed – there's no waiting for inclusion in a future quarterly or semiannual issue.

The Publishing Process

As with traditional paper journals, *CJTCS* features rigorous peer-reviewed scholarship and thorough copy-editing. Editor-in-Chief, Janos Simon, and Managing Editor, Michael J. O'Donnell, are both from the Computer Science Department, University of Chicago.

The editors, working closely with staff at The MIT Press, are discovering which procedures work and which are problematic in e-journal publication. The process is relatively straightforward – when outlined on paper.

For articles to be considered, authors must prepare them in LaTeX format and submit them by electronic mail or file transfer to the *CJTCS* server. LaTeX, a powerful technical and mathematical formatting language, was chosen because it is widely known and used by scholars and researchers. Articles are sent out, electronically, for peer review. This is one part of the process where the Press and editors had hoped to save time, but it hasn't yet happened; electronic review is taking about the same amount of time as print review.

continued on page 2 ▶

E-Journal Publishing

continued from page 1

Once accepted, an article is edited and the LaTeX source is cleaned up for cross-platform and multiple-format compatibility. Michael O'Donnell is developing scripts to automate content tagging and other formatting. Articles are published in several formats for reading or printing: LaTeX, PostScript, ASCII, and DVI. The LaTeX version lets the subscriber do custom formatting before printing. Under investigation is an innovative system, AsTeR, that translates LaTeX files into audio.

Subscribers are notified by e-mail when a new article is published on the *CJTCS* servers. The notification contains information about the article, including an abstract, plus directions to FTP and World Wide Web sites from which the article can be retrieved. Libraries that subscribe to *CJTCS* can download the article to their own servers or direct their patrons to the *CJTCS* Web pages. Institutional subscribers are given broad usage rights, for example to convert the electronic file to archival forms such as microfiche or paper, or to make paper copies for interlibrary loan.

Issues with Libraries

E-journals raise issues not only for publishers, but also for libraries. The MIT Press is working closely with the MIT Libraries to address these issues. Carol Fleishauer, Associate Director for Collection Services of the MIT Libraries, spoke of the impact electronic publications are having on libraries.

Electronic publications (e-pubs) challenge the traditional definition of a library as a collection: with e-pubs, what does the library collect? It does not necessarily need to collect the e-pub files, because they can reside on remote servers. This raises questions about the library's role as an archive and perpetual preserver of intellectual resources: if the library doesn't collect the files, who assumes the responsibility for preservation? This is crucial for keeping electronic information accessible in the future, and is complicated by the fact that file formats and technologies change frequently and are often not backwards compatible.

Another issue for libraries is that of cataloging. Is cataloging of e-pubs even necessary, given network navigation tools? Traditional cataloging practices bring the advantage of consistency to names and other search terms. How do you describe e-pubs in ways that are bibliographically acceptable? Think, for example, of how you cite page numbers when quoting from a book; in purely electronic form, that "book" would probably not have pages. Do printed and electronic versions of the same item appear on the same or separate catalog records?

As experience is gained and discussions between publishers and libraries continue, answers will begin to emerge. Both parties have a keen interest in developing standards that preserve the best aspects of scholarly publishing, while fostering the exploration and integration of new technologies.

New Launches

Guided by the lessons learned from publishing *CJTCS*, The MIT Press is preparing to launch three other e-journals over the next year:

- *Journal of Functional and Logic Programming*
- *Journal of Contemporary Neurology*
- *Studies in Nonlinear Dynamics and Econometrics*

For information about these journals, and a look at *CJTCS*, go to The MIT Press Journals home page at

`http://www-mitpress.mit.edu/jrnls-catalog`

New Emergency Phone System Pinpoints a Caller's Location

MIT Campus Police has installed a new emergency telephone system at its headquarters in W31. This system uses an ISDN Application Program Interface (API) telephone connected to a computer. When someone on campus dials 100 – the MIT emergency phone number – the system displays the following information on the computer screen:

- the caller's phone number
- all locations associated with the number
- the date and time of the call

The E100 system works with any ISDN telephone that is part of the campus system, including hallway phones and outside emergency phones, such as those in the parking garages. It does not work with pay phones on campus.

Primary and Secondary Numbers

Some telephones on campus have both a primary number and a secondary number. (A secondary number is an additional number assigned to a phone or a number shared with other phones.) If a "100" call is made from a campus phone with both primary and secondary numbers, the emergency phone system will display all the information associated with the number used to make the call.

For example, if a caller uses a secondary number to place an emergency call, and that number is shared with other phones, all the locations associated with that number are displayed. This improves the ability of Campus Police to respond in cases where callers cannot identify their location.

A Team Effort

Campus Police worked with programmers and telecommunications specialists in Information Systems on this safety-enhancing project.

MIT Information Systems

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Adobe Acrobat Sets a Standard for Electronic Publishing

Robyn Fizz
Publication Services

Adobe Systems calls its Acrobat software suite "the universal electronic publishing tool." If any other company made that claim, you could dismiss it as the usual hype from corporate marketing. But Adobe has been a key player in publishing-based software from the start. It's the company that developed PostScript, the page description language that's an industry standard. Adobe is also well-known for Photoshop, Illustrator, and the Adobe Type Library. Recent additions to Adobe's lineup include PageMaker, FrameMaker, and some promising Web publishing software.

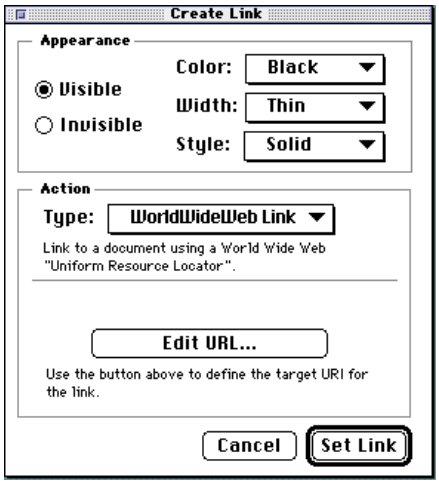
So Adobe knows its turf, and has poured a lot of resources into its Acrobat family of products. While Acrobat isn't a universal tool yet, it may follow in PostScript's footsteps and become a publishing standard.

What Acrobat Offers

Acrobat software lets you share documents across platforms through its Portable Document Format (PDF). Files from almost any application can be turned into PDF files. The PDF format retains a document's layout, fonts, and graphics, regardless of the software or fonts on a recipient's computer. The PDF format is also versatile when it come to distribution; these electronic files can be published on network servers, the World Wide Web, and CD-ROMs, or sent via e-mail.

You can view PDF files on screen as you would any other computer file. You can print these files on your local printer, and they will look just like other paper documents. But Acrobat takes electronic publishing a step further – through hypertext.

If you are creating a PDF file, you can add links to related information (à la links on World Wide Web). Bookmarks can act as on-screen navigational aids (e.g., a clickable Table of Contents that takes readers to selected pages). You can attach notes for colleagues who are reviewing a document. You can even embed sound and video clips into PDF files.



Acrobat Exchange lets you create links to documents on the World Wide Web.

More About PDF

The PDF file format is based on PostScript, Adobe's page description language. This device-independent language describes the appearance and placement of all elements on a page. PostScript is supported by thousands of applications and a large number of output devices.

The PDF format has been optimized for electronic distribution. PDF files are compressed for faster downloading, and can include hypertext features not found in PostScript files.

The Acrobat Family

Acrobat is a family of products that run on Macintosh and DOS/Windows computers, as well as selected UNIX machines (Sun SPARCstations and HP Series 9000 workstations). Initially, many users get confused about which members of the Acrobat family do what things. The focus here will be on the basic Acrobat products – Reader, Distiller, and Exchange. To find out more about the complete product suite, including Acrobat Capture and Catalog, visit Adobe's Acrobat Web site at

`http://www.adobe.com/Acrobat/Acrobat0.html`

This Web page also lists the system requirements for each platform.

Acrobat Reader

Acrobat Reader lets you view, navigate, and print PDF files. Adobe wisely decided to make the Reader free, to encourage the use of all Acrobat products. You can download the current version of the Reader, 2.1, from Adobe's Web site. It's also one of the helper applications available in the Web folder on net-dist.

The Reader includes several tools for navigating a document. You can click on bookmarks and thumbnails – if the file contains them. You can page through a document using arrow keys, the scrollbar, or buttons in the toolbar. The Reader lets you zoom to different magnifications, and search for words within a document.

Acrobat Distiller

The Distiller's only task is to convert PostScript files into PDF files. With simple files, this task can also be done with an Acrobat component called PDF Writer. However, if your files come from a drawing, page layout, or image editing program, Distiller is the way to go. It's built to handle EPS artwork, high-resolution images, and other complex illustrations.

Acrobat Exchange

Exchange lets you add links and notes to documents, and set security options. You can password-protect files, and turn on or off the ability to print a file or make changes to it. Exchange also includes all the tools found in the Reader.

Purchase and Support

To view, navigate, or print Acrobat files, download the free Reader. (To view PDF files on the Web, you'll need to configure Acrobat Reader as a helper application in your Web browser.)

If you plan to create Acrobat files, you will most likely want Acrobat Pro. It includes Exchange, Distiller, PDF Writer, Adobe Type Manager, and Search. The MIT Computer Connection sells Acrobat Pro for Macintosh and Windows for $149. The MCC also sells Acrobat for Workgroups for $399. This package includes 10 Acrobat licenses and Catalog, an application that creates full-text indexes for collections of PDF files shared over a network.

The Athena Computing Environment supports Acrobat Reader 1.0 on Suns and 1.0.1 on SGIs. Adobe has not developed Readers for DECstations or IBM RS/6000s.

If you have questions about using Adobe Acrobat, contact the Microcomputing Help Line at x3-0001 or <micro-help@mit.edu>.

Apple Releases Open Transport, A New Network Architecture

Alicia Allen
Network Services

Open Transport (OT) is Apple's new networking architecture – the standard for all future Macintoshes. OT gives Power Macintoshes greater connectivity speeds and abilities when used with software written for it. It makes it possible for developers to create network cards that can be ported easily across platforms; to write network protocols that run on a variety of platforms; and to design network-based software that will work regardless of the underlying protocol.

The OT architecture includes new versions of AppleTalk, TCP/IP, and serial communications. The TCP/IP and AppleTalk protocols have been rewritten to run in native mode on Power Macs, and thus can take advantage of many of the programming features of these machines. OT supports dynamic reconfiguration, so there's no need to reboot when changing an IP address or other settings (although you will have to close and reopen network applications that are IP-address aware, such as TechMail, MacZephyr, and NCSA Telnet). Another plus is that OT works with virtual memory.

Version Control

OT is shipping with some versions of System 7.5.2, namely on the Power Macintosh 7200, 7500, 8500, and 9500. Although the PowerBook 5300s come with System 7.5.2, they do *not* have OT. *It should not be installed on the 5300s or on any other machine at this time.*

Version 1.0.8 of OT was recently released for Power Macs that already have a version of OT installed. IS strongly recommends that you upgrade these Power Macs to OT 1.0.8. It fixes many bugs, particularly with Netscape and Eudora. You can download the OT 1.0.8 Installer from the net-dist server or via the Web at

`ftp://net-dist.mit.edu/pub/mac/open-transport/`

OT 1.1, scheduled to ship by year end, will support all Macintoshes, including first-generation Power Macintoshes and 68030- and 68040-based machines.

Control Panel Changes

OT brings with it some significant changes in control panels. TCP/IP replaces MacTCP, and AppleTalk replaces the Network control panel.

When setting up your OT machine on MITnet, check first to make sure that you don't have any copies of MacTCP on your computer. You can do this using the Find File command in the Finder. Drag any copies of MacTCP to the Trash and empty it. Be aware that both the MITnet Bootstrap Disk and the MacPPP Installer that comes with Tether put a copy of MacTCP in your System Folder that you should remove.

The TCP/IP and AppleTalk control panels are different from their predecessors. For help configuring OT for Ethernet, request an updated MITnet Bootstrap Kit from the Network Help Desk. For MacPPP connections (Tether), see *Macintosh Dialup Access to MITnet Using MacPPP* (NS-31.1) at

`http://web.mit.edu/tps/www/NS/NS-31/ns-31.html`

OT and Network Applications

OT was written to increase the performance of network applications that use the OT application programming interface (API). However, most network applications, including Netscape and all MITnet applications, haven't been rewritten yet to take advantage of OT, so there is no speed advantage at this time. In essence, these applications are relying on the backwards compatibility Apple has built into OT – the ability to translate MacTCP calls. In future versions of the Macintosh operating system, Apple will support only OT; MacTCP will not be an option.

OT, TechMail-S, and Tether

TechMail-S is problematic when used with OT. IS plans to phase out support for TechMail-S in the coming months, and recommends that users migrate to Tether.

Tether works with OT when MacPPP 2.1.2SD or FreePPP 1.0 or 1.0.1 is used. Higher versions of MacPPP do not work at this time. When TCP/IP is configured properly, you should be able to connect to MIT via Tether.

For More Information

If you have questions about Open Transport, contact the Network Help Desk at x3-4101 <net-help@mit.edu>.

This column presents news and tips from the consultants who staff the Microcomputing Help Line, x3-0001. Check out their Web home page at `http://micro-help.mit.edu/`

Q I'm using Excel for Windows 95 (version 7.0). Sometimes linked numbers automatically update from one sheet in a workbook to another, and sometimes they don't. What's going on?

A You've discovered the linking bug in Excel. Microsoft has a fix for it called xl15link.exe. According to Microsoft, the patch fixes three bugs:

- The value of certain 15-digit numbers may change unexpectedly.
- A link from one sheet to the same cell or range in another sheet in the same workbook is not updated automatically.
- Excel becomes unstable when you transpose a range that contains a reference.

The xl15link.exe patch is a self-extracting file, and is available from Microsoft's Web page. To download it directly to your machine, open this URL:

`http://www.microsoft.com/kb/softlib/mslfiles/xl15link.exe`

Q I see that Windows 95 has Microsoft's e-mail client, Microsoft Exchange, built into it. Can I use this client with MIT's e-mail system, instead of TechMail for Windows?

A In a word, no. The MIT e-mail system is based on Kerberos authentication (that's what happens when you enter your username and password in TechMail or on Athena). Kerberos verifies you to the mail server so that you can receive and send e-mail. Microsoft doesn't support Kerberos, and as far as IS can ascertain, doesn't have plans to do so.

TechMail does work with Windows 95, once you make adjustments to your system configuration that enable Kerberos to work. For details, see

`http://web.mit.edu/win95/netapps-notes.html#techmail`

HP Printers Set the Pace

Ginny Williams
MIT Computer Connection

The MIT Computer Connection carries the complete line of Hewlett-Packard printers, from affordable inkjets to PostScript laser printers.

Descriptions of two new LaserJets and three new DeskJets follow. (The LaserJets are grayscale; the DeskJets offer black-and-white or color printing.)

LaserJet 5Si
HP-C3166A MIT $2960

The LaserJet 5Si is a high-volume, 24 page-per-minute (ppm) laser printer designed to handle the print needs of large networks and departments. It offers 600-dpi resolution and more than 120 levels of gray.

HP JetAdmin printer software lets you install and configure the printer in minutes, and offers control features like printer monitoring and remote diagnostics. For end users, JetAdmin provides automatic driver downloading and immediate job status information.

The LaserJet 5Si is based on the enhanced HP PCL 5 printer command language, and comes with Intellifont and TrueType fonts.

LaserJet 5Si MX
HP-C3167A MIT $4150

The LaserJet 5Si MX has all the features of the 5Si – and more. It offers both PostScript Level 2 and HP PCL 5. Its built-in HP JetDirect card for Ethernet and LocalTalk networks provides plug-and-play connectivity; the card has flash memory for future upgrades of network operating systems.

The 5Si MX includes Adobe Type 1, Intellifont, and TrueType fonts.

DeskJet 340 with Cut Sheet Feeder
HP-C2655A MIT $305

The lightweight DeskJet 340 for PC notebooks and PowerBooks (with optional HP MacAdapter) lets you print at home or on the road. It delivers crisp, 600- by 300-dpi output of high-quality black. You can add color with the optional HP Color Kit.

DeskJet 1600C
HP-C3540A MIT $1445

The DeskJet 1600C is a network-capable office printer for DOS, Windows, and OS/2 environments. It's a plain paper, thermal inkjet printer with enhanced HP PCL 5. Its four high-capacity cartridges let you print in black (600 dpi) or color (300 dpi). The printer notifies you when a cartridge is out of ink. A PostScript Level 2 upgrade kit is available for this model.

DeskJet 1600CM
HP-C3541A MIT $2145

The DeskJet 1600CM has all the features of the 1600C, plus PostScript Level 2 drivers for Windows and Macintosh, QuickDraw and QuickDraw GX, and an HP JetDirect print server for Ethernet/LocalTalk.

More Product Information

For a complete list of HP products available through the MCC, call x3-7686 or send e-mail to <mcc@mit.edu>. You can also find a wealth of product information at HP's Web site:

`http://www1.hp.com/ahp/home.html`

IS Offers HP-UX Software Services

Linda Lancaster
Computer Services

Hewlett-Packard software updates are now available to MIT HP Series 700 workstation users through an MIT-wide software service agreement. This agreement lets IS Computer Services distribute HP software and updates to users throughout MIT. For now, the service involves software distribution only; technical support is available through HP.

Technical Support from HP

HP offers direct technical support through its "Additional Support Node" option. You can purchase this option through IS for an annual fee.

Additional Support Node service is targeted at sites with a significant number of HP workstations and a need for ongoing HP technical support. This service provides:

- Two named callers to HP technical support
- One set of HP-UX and layered software product updates shipped directly to your address

Note: The HP contract limits MIT to a maximum of 12 Additional Support Nodes. IS anticipates this will cover most, if not all, significant HP sites at MIT. However, Additional Support Nodes will be allocated to MIT HP sites on a first-come, first-served basis.

What's Available Now

To date, IS has received HP-UX 10.01 and 9.05 media, and a shipment of layered products. (Layered-product-update CDs ship every other month.) IS is working with HP to obtain additional sets of media.

In addition to the current revision of HP-UX (10.01), updates of the following HP layered products are available through IS:

- ANSI C
- HP-UX Developer's Toolkit
- Fortran
- C++
- Pascal
- UIM/X 2.9
- HP PowerShade Runtime Environment

Fees and Subscription

An annual fee of $175 per CPU provides updates for HP-UX and the layered products listed above. There is a volume discount for sites registering more than 20 CPUs. Additional Support Node service costs $1236 per year over and above the per-CPU fee.

To subscribe, complete an HP Software Library sign-up sheet and return it to Computer Services, W20-028, with a requisition for the appropriate amount. (At Lincoln Lab, the sign-up contact is Paul Young, LL-C-151.) If you need more information, contact the Software Library Office at x3-6320 or <help@isis.mit.edu>.

Insurance for MIT Computers: What You Should Know

Phyllis Galt and Susan Jones
Publication Services

You're probably aware of a recent rash of computer chip thefts on campus: Campus Police sent out a bulletin in August and *The Tech* wrote an article (`http://the-tech.mit.edu/V115/N47/chips.47n.html`). Fortunately, MIT's insurance program covered much of these losses.

This article looks at MIT's insurance coverage for computers – and chips. The sidebar ("Eight Steps") gives tips on protecting your equipment; it's followed by a list of contacts on campus.

All-Risk Insurance

MIT's basic coverage is "all-risk" insurance for the campus and satellite properties (e.g., Lincoln Lab, the Bates Linear Accelerator). Coverage from loss is comprehensive with few exclusions. MIT is covered for loss due to fire, flood, earthquake, theft, vandalism, and water damage.

Deductibles

When equipment is stolen, the affected department is responsible for the first $1000 of the deductible, and MIT covers the rest. When adequate security devices (such as locking pads or enclosures from AnchorPad or CompuGard) are in place, the Insurance Office may waive payment of the $1000 deductible by the department. For information about approved security devices, call Campus Police. To find out about qualifying for waivers, call the Office of Insurance and Legal Affairs.

While you can take measures to guard against theft, the same cannot usually be said for damage or loss from fire, water, or natural catastrophes. Fortunately, such disasters are a statistically lesser threat than theft. In case of loss due to such disasters, the department does not have to pay a deductible.

Equipment Must Be Registered

For property to be covered under MIT's insurance, it must belong to the Institute and be registered with the Property Office. (Any computer bought on an MIT requisition is automatically registered with the Property Office.) Government property is not covered, nor is the personal property of employees or students – except where the property is authorized specifically for use on an MIT project.

Software and Data Excluded

While registered computer equipment is insured, software and data are not. The storage *media* (e.g., the disks or tapes) are covered – but MIT's insurance does not cover what's on the media. If expensive software is stolen or damaged, you can recover only the cost of the disks or tapes.

In the case of data loss, MIT does carry insurance to cover the cost of re-collecting the data. But this can be complex and time consuming. For software or data, your best insurance is adequate backup, including off-site storage. For advice about backup programs, call the Microcomputing Help Line (also, see the article about ADSM on page 7).

Taking a Computer Off Campus

If you plan to take an MIT-owned computer home or move it from your office, you must first receive approval from your department head or lab director and then notify the Property Office by e-mail, phone, or a Change of Equipment Status form. You should provide the following information:

- MIT Property Office tag number
- Type of computer (e.g., Power Macintosh 7100/80)
- Serial number
- Who is taking the computer
- Where it will be taken
- When it will be returned to campus

MIT's insurance extends to equipment taken off campus, but within the United States, Canada, or Puerto Rico.

If you plan to take an MIT computer to any other country, you must also inform the Office of Insurance and Legal Affairs, preferably 30 days in advance. There will be a small charge for additional coverage. Send a memo, approved by your department head or lab director, describing the equipment, its value, how it will be shipped, a copy of your itinerary, where the equipment will be used, the name of the person responsible for it, and the account number to which the additional insurance premium will be charged.

Eight Steps to Protect Your Computer Investment

1. Be sure that new equipment is registered. If you remove equipment from campus before Property Office personnel can tag it, you will be sent tags to affix to it. You will also receive a form asking you to indicate the model and serial number of the equipment; return this form promptly to the Property Office.
2. Record all serial numbers (there are none for chips) and keep them in a safe place. Keep a copy of invoices too.
3. Always lock your door when you leave the area.
4. Secure your equipment to a desk or hard-to-move surface with an approved security device.
5. Back up your computer files and store them off site.
6. If you lend MIT equipment, keep track of it. Write down the make, model, and serial numbers, and have borrowers sign for the equipment.
7. Ask the Crime Prevention Unit of Campus Police to perform a security survey of your office, lab, or area.
8. Look into Operation ID, a program for marking equipment, sponsored by the Crime Prevention Unit.

Useful Campus Contacts

Physical Security Review; Operation ID
Campus Police Crime Prevention Unit
x3-9755 <crimbite@mit.edu>

Information Security Planning
Information Security Office
x3-1440 <gii@mit.edu>

Security Products
MIT Computer Connection
x3-7686 <mcc@mit.edu>

Insurance Coverage
Office of Insurance and Legal Affairs
x3-2822 or x3-2823

Backup Program Referrals
Microcomputing Help Line
x3-0001 <micro-help@mit.edu>

Equipment Registration
Property Office
x3-2776 <property@mit.edu>

To Report a Theft
Campus Police
x3-1212 (if an emergency, dial 100)

An Enhanced Version of i/s Debuts on the World Wide Web

Robyn Fizz
Publication Services

Almost from the start, the *i/s* newsletter has been produced using computers. It has been part and parcel of the desktop publishing revolution. It now joins hundreds of other publications in the next wave – electronic publishing via the World Wide Web.

Hypertext Bonuses

i/s will still be published on paper for some time to come. However, the *i/s* Home Page at

`http://web.mit.edu/tps/www/isnews/`

offers bonuses that go beyond what a paper publication can provide. While the online *i/s* (an Adobe Acrobat file) looks just like its paper counterpart, it is studded with hypertext links. These are made possible by Acrobat's PDF format (see the Software Spotlight on page 3). If an online publication is mentioned in the Acrobat version of *i/s*, you can click on a link that will take you right to that publication. For example, the back page of *i/s* frequently lists recent IS publications. If you are browsing this list in the online *i/s* and see a document you want, you can view (and print) a copy immediately by clicking on the link. Similarly, the online *i/s* offers links to software sites, Web pages for vendors and organizations, and so on.

To open the Acrobat version of *i/s*, you need to download a free copy of Acrobat Reader 2.1 and configure it as a helper application in your Web browser. There are links on the *i/s* Home Page to step you through this process. (In the near future, you'll be able to open Acrobat files without having to configure a helper application.)

Other Pluses, Other Links

The *i/s* Home Page also serves as a searchable archive. The Back Issues link lets you connect to text-only versions of *i/s* articles, posted on TechInfo, that go back to 1992. To do a full-text or keyword search on these articles, click on the Search link. (The back issues of *i/s* saved as Acrobat files start in September 1995, and can only be searched from within each issue.)

The Feedback link lets you communicate with *i/s* staff via e-mail. Your comments (including feedback about the *i/s* Web page), corrections, and ideas for articles are welcome. The Related Publications link takes you to a list of other IS publications, as well as to selected computing newsletters at other universities.

Under the Distribution link, you can subscribe to the paper version of *i/s* (if you are off campus or prefer to get a copy addressed directly to you, rather than picking up a copy from the bundle delivered to your department). You can also ask to be added to the is-sub list, a notification service that alerts you via e-mail when the latest issue of *i/s* has been published online.

i/s

One last tip: You can return to the *i/s* Home Page by clicking on the *i/s* icon at the bottom of each linked page.

Back up Your Files over MITnet with ADSM

Mary Ellen Bushnell
Publication Services

You can never be sure when your hard disk may fail or be damaged or stolen. The only way to guarantee that your computer files will be there when you need them is to back them up on a regular basis. But unless your department has a system administrator who backs up your files remotely, you may be spending a lot of time copying files to diskette or plugging in a tape drive.

If your computer is on MITnet, you can back up files easily through a low-cost service provided by IS Client Services. This service is based on ADSM (ADSTAR Distributed Storage Manager), software from IBM that lets you back up files from a networked computer onto the IBM mainframe in W91.

Client Services provides full support for Macintosh and Windows users who choose this service, and partial support for many other workstations and servers. For a list of supported platforms, see

`http://web.mit.edu/tps/www/QG/ADSM/ADSM.More.html`

Why ADSM?

There are several reasons to subscribe to the ADSM backup service:

- It frees you from having to handle backup equipment and media.
- Backups are very fast.
- Once you start a backup, you don't need to be at your computer; the process continues without prompting until it is finished.
- You can schedule an automatic backup to take place off hours or at a time that is convenient for you.
- Backups are stored in a secure place that is separate from your office.

Backing up Files

ADSM is easy to use. The program prompts you for a password and then displays the main screen where you see the volumes (e.g., hard disks) mounted on your desktop. You choose the volumes you want to back up. There are several options, but the incremental backup is the simplest. The first incremental backup copies all your files; subsequent backups copy only new or changed files. ADSM keeps 10 backup copies, one active and nine inactive. The active copy is kept indefinitely.

Restoring Files

To restore files, you go to the main screen, and choose the volume(s) and then the files that you want. Since files are stored off-line, you may have to wait a few minutes for the operator to mount the right tape. You are notified when the restore function is done.

You can restore files from 8am Monday to 5:30pm Saturday, and from 9am to 5:30pm Sunday. The mainframe is unattended on holidays.

Requirements

To use the service, you need a connection to MITnet, ADSM software, compatible TCP/IP software, a nodename, and a password. Macintosh users must have System 6.0.7 or later. PC users need Windows 3.1 or 3.1.1. (Windows 95 support will be available soon.)

Fees and Contact Information

The ADSM service is available to the MIT community, including students. The ADSM software is free, and backups are free to those with mainframe accounts; for everyone else, the service costs $5 a month.

For more information or to register for ADSM, contact Client Services at x3-7230 or <mithelp@mit.edu>.

Getting Help

If you don't know where to get help for your computer, network, or telephone problems, call the IS Help Line, **x3-2001** – or direct dial one of the help lines listed to the right.

If you prefer to use electronic mail, you can send your questions to the corresponding 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 help with...	Dial...	Or send a message to...
Athena Computing Environment	3-4435	olc@mit.edu
Athena hardware repairs	3-1410	hotline@athena.mit.edu
Computer sales	3-7686	mcc@mit.edu
DEC and Sun software	3-6320	help@isis.mit.edu
Disabilities and computing	3-7808	atic@mit.edu
IS mainframes	3-7230	mithelp@mit.edu
Microcomputer and printer repairs	3-0815	pcservice@mit.edu
Microcomputer use	3-0001	micro-help@mit.edu
Networks/MITnet	3-4101	net-help@mit.edu
Telephone repairs	3-4357	5help@mit.edu
Voice mail	3-3677	vmail@mit.edu

Recent Publications from Information Systems

These publications are free, unless followed by a ($$). Paper documents in the AC series are available only in the Quick Copy Center in 11-004. You can pick up the others in the MCC, W20-021, or in the racks outside E19-630.

Some of these publications are on the World Wide Web. To view them, use the URLs listed beneath the titles (to read PDF files, your Web browser must have Acrobat Reader 2.1 configured as a helper application).

You can also request IS publications by calling x3-5150 or sending e-mail to <sendpubs@mit.edu>.

Order No.	Title
AC-56 ($$)	*FrameMaker on Athena, Version 1* (for an electronic version, type `help` at the `athena%` prompt)
MC-13	*Windows 95: System Compatibility and Requirements* `http://web.mit.edu/win95/`
NS-5	*Four Ways To Get MITnet Applications* `http://web.mit.edu:1962/tiserve.mit.edu/9000/41024.html`
NS-44	*Basic FAQS About Eudora at MIT* `http://web.mit.edu/tps/www/Eudora/eudorahome.html`
QG-6	*Microsoft Word for Windows (version 6): Tips and Shortcuts* `http://web.mit.edu/tps/www/QG/QG-06/QG-06.pdf`

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