UNIVERSITY
OF MINNESOTA

Office of Information Technology

Competitive Prices

UCS (University Computer Services) has an abundance of used computer equipment for sale at very competitive prices. The showroom is stocked with Macs, PCs, monitors, printers and various computer equipment parts.

All computer equipment is tested by UCS consultants and includes a 30-day warranty. Visit the UCS showroom at 2218 University Ave. or visit the UCS Website for a detailed list of equipment for sale.

Questions? Contact UCS for more information.
• 612-624-4800
• http://www.umn.edu/ucs

Information Technology

Newsletter

The eFAAN goes live. Saves trees.

A Web-based Financial Aid System

A new application, developed by the Web Development team in conjunction with the Office of Student Finance (OSF), allows University students for the first time to respond to their financial aid award notices (FAANs) via the Web. It is anticipated that the new system, called the eFAAN, will greatly reduce the processing burden on OSF staff and streamline the awarding, acceptance and disbursement of financial aid to approximately 30,000 students across all four University campuses.

The eFAAN replaces a paper- and "snail mail"-based process, and as an added benefit will reduce the amount of paper used by OSF this year by approximately 1 million sheets!

An outgrowth of the Web registration system, the eFAAN was developed over a 12-month period, culminating in its release on July 16, just before students are awarded aid and begin to accept their awards for the upcoming academic year. During late July and early August each year, students will be notified via email that they have been awarded aid; a link in the email will direct students to the eFAAN, from which students can accept, decline, or in some cases reduce, the offered awards.

The ability to accept aid online is particularly timely this year, given the legislature's late decision on funding for the University. OSF must be ready to disburse aid to students when the fall term begins.

> *eFAAN allows University students to use the Web to respond to their financial aid award notices.*

http://www.umn.edu/oit

The eFAAN has already received much attention, both within the University community and among the general public. Richard Pfutzenreuter, Associate Vice President in the Office of Budget and Finance, cited the eFAAN in a recent *StarTribune* article as an example of how the University continues to improve service to students despite cuts in state funding.

Earlier this year, a reception showcasing the eFAAN and the University's other Web capabilities was hosted by Nancy Sinsabaugh, Interim Director for the Office of Student Finance, and was attended by numerous state legislators and U. S. Deptment of Education officials. Look for further publicity (positive publicity, we hope!) as students return to campus and experience the eFAAN for themselves.

■ Questions regarding the eFAAN can be directed to Bruce Stone, project manager for Web Development, at 612-625-6402 or stone063@umn.edu

Internet Security

Network attacks

Benefits and risks

While the Internet has many benefits, it also has associated risks. A key risk to being connected to the Internet is the risk of a network attack.

There are many types of network attacks, but they all have some things in common. Some network attacks can be in the form of a computer virus with virus-like symptoms.

A definition

A network attack or security incident is defined as

a threat, intrusion, denial -of-service, or other attack on network infrastructure, computer system(s), or user account(s). Computer security incidents can vary from annoying email directed at an individual to intrusion attacks on sensitive data and computer systems. Some security incidents are inherently computer-based; in others, the electronic me-

dium is coincidental to the crime or policy violation

Some criteria

A network attack may be recognized by changes on your computer that were not made by you, such as files erased or changed and programs running that you didn't start. If your computer is operating much slower than usual, but only when plugged in to the network/Internet, a denial-of-service or other network attack may be in progress directed at your computer, your building or the whole University of Minnesota computer network.

Network attacks are rarely directed at faculty, students or staff. More often, attackers do not intend to harm an individual; they are searching for an easily compromised computer from which to launch another attack.

Reporting incidents

All security incidents need to be reported following University guidelines.

☐ To report a computer security attack in progress, call 612-625-0006, the NTS (Network and Telecommunications Services) Technical Assistance Center and ask that a security ticket be opened.

☐ To report a security incident after the fact, send all logs and incident documentation via email to: nts@nts.umn.edu

☐ To inquire about computer viruses and computer security, you can call the Technology HelpLine at 612-301-4357.

☐ To view network security policies and procedures, select the "Network Security" link from the NTS Website: http://www.umn.edu/nts

☐ More information about computer security and viruses can be found at the CERT Coordination Center (CERT is a registered service mark of Carnegie Mellon University): http://www.cert.org

■ Tips from NTS Technical Assistance Center staff

Denial-of-Service Attacks

Worm turned. Packet storm averted.

Were you online the week of July 20? If you were, you probably noticed slow, or no, Internet response because the University of Minnesota and Websites around the English speaking world had worms. The worms even managed to crash the modems of DSL (digital subscriber line) customers in the Twin Cities and elsewhere.

The worm is actually a program called Code Red, which was replicating itself and gathering resources, in this case access to inadequately protected Web servers running Microsoft's server software. All the "captured" servers would be used to launch a distributed denial-of-service attack on the Whitehouse Website.

Fortunately, the worm was out-maneuvered, and Internet traffic resumed its normal pace.

Denial-of-Service

A denial-of-service attack aims to shut down the targeted Website by flooding the Website's server with more data and requests than it can handle. The deluge keeps the server so busy that all other business is impossible.

During the barrage, Web services that are not targeted can also be affected by the volume of data that flows down the net to the attack site.

> "Non-compromised systems and networks that are being scanned by other hosts infected by the "Code Red" worm may experience severe denial of service."
> [Source: http://www.cert.org /advisories/CA-2001-19.html]

Additional references

☐ Microsoft Security Web page: http://www.microsoft.com/security

☐ "Code Red" vulnerability: Microsoft Security Bulletin MS01-033

"Microsoft strongly urges all web server administrators to apply the patch immediately."

Generally attackers are searching for an easily compromised computer from which to launch another attack.

http://www.microsoft.com/technet /treeview/default.asp?url=/technet/security /bulletin/MS01-033.asp

• The patch — Bulletin MS01-033 contains links to download locations for the patch.

• Windows 2000 Server — since "IIS 5.0 installs by default as part of Windows 2000 server products, and Idq.dll is installed as part of the IIS 5.0 installation process," those setups are vulnerable.

• Windows 2000 Professional — although the "default installations of Windows 2000 Professional are not vulnerable…if you have installed IIS 5.0 you are vulnerable"

• Windows NT — although "Default installations of Windows NT 4.0 are not vulnerable...if you have installed IIS 4.0 you are vulnerable." If you installed the Windows NT 4.0 Option Pack, you may have installed IIS 4.0.

☐ "Year of the Worm," a March 2001 report from CNET: http://news.cnet.com/news /0-1003-201-5125673-0.html

☐ From CERT — vulnerabilities of popular products: http://www.kb.cert.org/vuls

We recommend

If you have IIS installed, confirm that you have applied and enabled all of the available patches — even for features that are installed but not activated!

■ News brief from the OIT Technology Helplines

Egads! Etexts!

Exhilarating, eye-popping, inspiring, intoxicating, intriguing and sometimes annoying
Nancy K. Herther, University Libraries, http://www.lib.umn.edu

Read any good ebooks lately? Browsed through any ejournals? Used a Rocketbook? More than likely you have. Electronic versions of traditional research materials are all the rage on campuses across the country.

The University Libraries currently have over 9,000 ejournals in MNCAT and over 14,000 cataloged ebooks and electronic versions of government reports and other materials. Of our nearly 200 online databases and indexes available through LUMINA, one-fourth include at least some full-text. We have over 3,400 CD-ROM indexes and reference materials spread throughout the Libraries, and our Web page has over 300,000 visitors per day.

The University Libraries have, in many ways, been one of the nation's leaders in efforts to digitize existing research and teaching collections and to bring electronic materials to our users.

In this column, we'll take a look at some of the efforts currently underway here in the Libraries.

Electronic Text Research Center

Recently relocated to a spacious and inviting facility on the second floor of Wilson Library on the West Bank, the Electronic Text Research Center (ETRC) specializes in materials in the humanities and social sciences. It provides in-depth assistance with primary-source files in searchable full-text format and also with text-analysis software. The center conducts various digitization projects to demonstrate how texts can easily be made computer-readable and customized for teaching and analysis. It currently sponsors three projects of its

Get Started: Top 10 Etext Websites

Take a good look at the Libraries Web page for listings and links to tens of thousands of etexts from sites around the world: http://www.lib.umn.edu

Here are just a few good etext Websites that you might want to explore to get an idea of where the technology and the opportunities are today.

▼ **Books on the Internet**
http://www.lib.utexas.edu/Libs/PCL/Etext.html
■ A good directory to over 17,500 full-text books on the Internet. All are linked to the sites. Categories used include: Classics; Computer Books; Foreign Languages; Literature in English; Philosophy and Religion; and Poetry.

▼ **EDGAR Archives (SEC)**
http://www.sec.gov/edgarhp.htm
■ Years ago, online access to the full-text of SEC filings for publicly held companies was only through expensive, pay-as-you-go dial-up services. Today these materials are available freely to anyone who visits the Website. Interested in investing? Studying the profits of oil companies or affirmative action efforts of some industry? Give this a try.

▼ **The English Server** — http://eserver.org
■ Over 30,000 texts in the humanities are given along with links to associated sites. Searchable and browsable, this is maintained by a group of students and faculty at the University of Washington.

▼ **EpistemeLinks:** Philosophy Resources on the Internet — http://www.epistemelinks.com
■ What doesn't involve philosophy? Here is a great place to begin the study of any field or school of thought. This mega-site includes thousands of links to resources devoted to philosophy. The main sections are Philosophers and Topics and Traditions, searchable by time and subject area. Also included are links to Images, Print and Electronic Journals and Etexts as well as links to terms in several online philosophical encyclopedias, including the online version of *The Oxford Companion to Philosophy*.

own, and provides assistance with several others. Two of the center's own projects involve Women's Studies: "Early Modern French Women Writers" and "Women's Travel Writing, 1830-1930." The third project deals with "Early 19th Century Russian Readership and Culture."

The two Women's Studies projects involve work with graduate students and faculty, and both have received external recognition. Last year the Early Modern French Women Writers project received an important, unsolicited Internet award; it was selected as a Links2Go "Key Resource" in the Women's Writers category. Each quarter, Links2Go samples millions of Web pages to determine which are most heavily cited by Web page authors. More recently the

Women's Travel Writing project was invited to participate in the first annual Women's Writing Projects Symposium in New York, held in conjunction with the Annual Conference of the Association for Computers in the Humanities.

Training sessions

Each year the ETRC sponsors etext training sessions. Usually held in Wilson Library, the sessions are free and informal, with plenty of time for questions, and are open to all faculty, students and staff. This spring the sessions took the form of a one-day EText Extravaganza, with a guest speaker and multiple concurrent sessions. The sessions included demonstrations of primary-source textbases, software programs and analysis methodologies.

The 2001 event will be held on October 5 and will include a keynote address by John Unsworth, Director of the Institute for Advanced Technology in the Humanities at the University of Virginia.

With the trend to putting course materials on the Web, the ETRC may be a life-saver for you as you plan for the coming school year.

If you would like more information, especially if you have a text-based project that you would like to digitize and mount on our server as a separate collection for easy Web access, please call the ETRC at 612-624-6370 or check out our Website at: http://etrc.lib.umn.edu

▼ **Folklore and Mythology**
http://www.pitt.edu/~dash/folktexts.html
■ A good collection of tales from around the world, many edited or translated by D. L. Ashliman, a professor of Germanic Languages and Literature. The site is organized by categories of stories as well as by collection or country/culture of origin. If you have children, or just enjoy a good story with a message, this is a good site to visit.

▼ **Historical Text Archive**
http://historicaltextarchive.com
■ A good, well-organized directory of historical resources. It includes many primary documents as well as links and electronic versions of print books, organized by geography/nations and topics.

▼ **IPL Online Texts Collection**
http://www.ipl.org/reading/books
■ Never read an ebook? This site includes over 16,000 titles that can be browsed by author, title or Dewey Classification. Created by the Internet Public Library (IPL) group, the fields in the record entries can also be searched.

▼ **On-line Books Page**
http://digital.library.upenn.edu/books
■ Over 13,000 online books and other types of full-texts by author and title; this index is searchable or can be browsed by author, title or subject.

▼ **Perseus Digital Library**
http://www.perseus.tufts.edu
■ A useful digital library of resources for studying the ancient world; it includes hundreds of texts by the major ancient authors and lexica and morphological databases and catalog entries for over 2,800 vases, sculptures, coins, buildings and sites, including over 13,000 photographs of such objects.

▼ **Project Gutenberg Index**
http://promo.net/pg
■ This site was one of the first, and it continues to be one of the best to bookmark for out-of-copyright books online in full-text. Over 2,000 texts are online now. Volunteers add more all the time.

■ Nancy Herther, University Libraries

Digital Collection and Service Units

The University of Minnesota Libraries recently established a Digital Collections & Services unit: http://digital.lib.umn.edu

This unit not only creates digital collections, largely from our own massive research collections, but also works to make these types of materials more accessible to us all.

Housed in the new Elmer L. Andersen Library on the West Bank, the unit works with all types of "digital" materials and collections. The Digital Collections & Services unit coordinates with other Libraries units to integrate digital collections with electronic subscription-based resources, such as full-text journals and ebooks for which we pay access fees. Still, its primary focus is online collections that are produced locally. The collections typically consist of information (text, images, etc.) that Libraries staff produce from library resources which are no longer under copyright.

The digital collections unit's Web page links to many of the individual sites for over a hundred separate digital collections or resources created in the Libraries over the past several years. The Libraries completed an inventory of our digital assets last year; and this is available from the Website, along with links to many of these resources.

Currently the unit is building search mechanisms that permit users to search across many of the existing and new databases from one page. The first such mechanism will be our IMAGES (Image Metadata Aggregation for Enhanced Searching) gateway. The IMAGES search mechanism allows users to search for digital visual resources, such as photographs, posters, drawings, etc. that exist in databases, not only within the Libraries but also across campus: http://digital.lib.umn.edu /IMAGES

The digital collections unit also provides scanning and printing services for users of special collections and archive materials, assists units in planning digitization projects, helps design databases, and consults on other services.

Sound interesting? Check out their Website, and then give them a call. They would be happy to work with you or to answer any questions you have about these new materials.

Is this the future of research?

If the hype is to be believed, some postulate that libraries as we know them are a thing of the past. 'Everything' will somehow get digitized and put on the Web, and we can close up shop in the various libraries across campus. However, reports of the death of libraries and the printed page have been greatly exaggerated – as have most of the contemporary claims for the future of many of the currently hot technologies.

In the April 2001 issue of *American Libraries* it is estimated that only 8% of all journals are available – at any cost – on the Web. If you've tried to use the Web to do some research yourself, then you know the difficulty of searching through hundreds – if not thousands – of hits, most of which are outdated or irrelevant to your needs.

Regardless of the quality of some of today's Web-based information, change is inevitable; and here in the Libraries we continue to evolve and work to integrate new resources and technologies into our services.

Want to learn more?

In the week that this was written, the *New York Times* ran a story about the recent Seven Pines Symposium (held annually at the Seven Pines Lodge in Wisconsin) on the accelerating pace of scientific research, which parallels the growth path of the computer and telecom revolutions. Titling their article "the Web as dictator of scientific fashion," the authors noted concerns of many in the sciences concerning how the Web may be contorting the scientific process.

Do you feel in control of your information resources? Are you trying to grapple with technology and the alternatives and challenges that it presents? Certainly we are here in the Libraries. Whatever the future, certainly technology will play a strong role in the future of the University and its library system.

What better place to learn about information than through the services and collections of our libraries! Check us out online or stop in at any of our reference units and interact with one of our friendly, experienced, *human* search engines!

We're online at: http://www.lib.umn.edu

◼ Communications about this column should be addressed to: Nancy K. Herther, Social Sciences Bibliographer, 170b Wilson Library, West Bank; 612-624-2020; n-hert@umn.edu

Do you like reading books online?

What is the best way to lay out materials on a computer screen?

What typefaces work best?

What types of reading experiences are best done online versus in print?

There is still a lot of room for improvement in many of the online etext systems. Major research centers now exist which are applying the sorts of rigorous scientific analysis and development that is needed. For more information on research in this area, check out some of these Websites:

▼ **Reading About Digital Libraries: Bibliographic Resources**
http://bcdlib.tc.ca/biblio.html
■ From the British Columbia Digital Library: links to conferences, discussions, collections of etexts and other online resources.

▼ **Designing Electronic Books, a Workshop** — held in conjunction with the CHI99 Conference in Pittsburgh, PA, May 16-17, 1999 —
http://www.fxpal.xerox.com/ConferencesWorkshops/chi99deb
■ Full-text of the major papers of this conference which cover a variety of research issues underlying this technology.

▼ **D-Lib Forum and D-Lib Magazine**
http://www.dlib.org
■ This site provides a forum for researchers and developers of advanced digital libraries and includes a monthly electronic magazine and links to projects and collections concerning digital library research.

▼ **Digital Initiatives Database (ARL)**
http://www.arl.org/did/
■ A collaboration between the Association of Research Libraries (ARL) and the University of Illinois at Chicago — this is "a Web-based registry for descriptions of digital initiatives in or involving libraries." The University Libraries' efforts are included in this database. It is searchable or browsable by name of project or institution.

▼ **Critical Thinking and the Internet —**
Exploring online modes of teaching, learning and research
http://www.engl.niu.edu/mday/web/critthink.html
■ A useful set of links, by an academic, on how to integrate all this Internet-based 'stuff' into the classroom.

▼ **Reading Online**
http://www.readingonline.org
■ A good source of information, this ejournal is produced by the International Reading Association.

■ Nancy Herther, University Libraries

▼ Help   Phone: Area Code = 612

Computer Misuse or Abuse (also see Procedure 2.8.1.1)
- Emergency Network Help Line 625-0006
- Non-emergency, e.g., spamming: `abuse@tc.umn.edu`

1 Help • 7/24/365, unless otherwise noted 301-4357
- ■ CCO: central systems, PeopleSoft
  - Web: `http://www.umn.edu/cco`
  - by email: `x-help@cafe.tc.umn.edu`
- ■ Internet, Email, Microcomputers,Distributed Systems
  - call-in Monday–Thursday • 8 am–11 pm
  - call-in Friday • 8 am–5 pm
  - call-in Saturday • noon–5 pm
  - call-in Sunday • 5 pm–11 pm
  - walk-in 8 am–5 pm, M–F:
    152 Shepherd Labs; 93 Blegen Hall; 50 Coffey Hall
  - Web: `http://www.umn.edu/adcs`
  - by email for U of M: `help@tc.umn.edu`
- ■ Passwords: new and forgotten ones
- ■ NTS-TAC: Technical Assistance Center
  - Web: `http://www.umn.edu.nts`

▼ Dial-in Computer Access

Internet/PPP/SLIP: up to 53kps if v.90 612-627-4250
(56k K-flex, Flex56, X.2 protocols are unsupported)

▼ Quick Guide

Modem Usage (current activity on your account)
   `http://www.nts.umn.edu/services/modemusage.html`
Internet/Email account management/validation
   `http://www.umn.edu/validate`
MNCAT/LUMINA (Library) – `http://www.lib.umn.edu`
Office of Information Technology
   `http://www.umn.edu/oit`
Onestop Services – `http://onestop.umn.edu`
TechMart – `http://www.techmart.umn.edu`
Technology Training Center
   `http://www.umn.edu/adcs/info/training.html`
UM News Servers – `news.tc.umn.edu, news.umn.edu`

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Threats, UM Police Department .... 911 on campus
   • off campus.. 624-3550
Computer Accommodation Program – voice/tty... 626-0365
U Computer Services/Computer Repair Serv 624-4800
Statistical Software Support:
   including SAS and SPSS 624-3330

Associate Vice President and
Chief Information Officer, Steve Cawley 612-625-8855

Newsletter subscription information and archives at http://www.umn.edu/oit/newsletter

Twin Cities campus address label trivia: the 2nd number after the Rec# is the Campus Mail delivery code, http://umn.edu/lookup

If you cancel or change a campus address, please tell us the **Rec#.** Just tear off the end page and send the entire mailing label to us. Or send email to:
`oitnsltr@umn.edu`

- ☐ *Delete/Cancel*
- ☐ *Change Name*
- ☐ *Change Address*
- ☐ *Change Other*
- ☐ *Add*

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