

Information Technology Newsletter

December 1996 from the **Office of Information Technology**
This newsletter is an information resource for the University of Minnesota.

Volume 1
Number 9

Technical CDs *Available to On-campus Network Users*



Academic and Distributed Computing Services (ADCS) purchased site licenses for several technical CDs. Currently four CDs are available for University Technical Coordinators to use:

1. Microsoft Technical Information Network: MS TechNet, 2 disk set
2. Novell Support Connection: formerly NSEPro, 2 disk set
3. Novell Consulting Services: 1 disk
4. Gartner Group: 2 disk set

Access Limitations

The information on all these CDs is accessible via a personal computer running Windows and a NetWare client; you can access the Gartner Group CD from a Macintosh. All the CDs are mounted on the new ADCS Information Server, also known as ADCS_INFO.

To access the CDs you must follow some specific instructions, which are provided below.

These instructions assume a general knowledge of NetWare client operations and are meant for the University technical community. If you are unfamiliar with how to do certain things, contact your Novell administrator for help.

Although these CDs are available to anyone at the University, much of their content is directed at Technical Coordinators. ADCS sponsors a forum for people who have been designated as Technical Coordinators for their departments or organizations.

For more information about that program read the "Technical Coordinators" article elsewhere in this issue.

About the CDs

MS TechNet

Here are excerpts from the information for new subscribers:

Microsoft TechNet, the comprehensive information source for technical professionals who evaluate, implement and support Microsoft business products.

You can now find, read and print tens of thousands of technical articles and strategic papers on Microsoft products written by Microsoft employees and industry experts: case studies, product facts, planning and integration analyses, white papers, complete resource kits, technical presentations. And the Microsoft Knowledge Base and Software Library. The Supplemental CD contains a huge current collection of drivers and patches.

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Some funds are provided by the University of the Minnesota Bookstores.

For more information about the computer products sold at the Computer Store visit their web page <<http://www.computerstore.umn.edu>>.

You can access the Bookstore's Books in Print site at <<http://bip.bookstore.umn.edu>>.



Associate Vice President for Academic Affairs and Acting Director of Information Technology
Donald R. Riley, Professor 626-9816

▼ Help

Monday–Friday

CCO (BASIS/AIS/CCS), 7 am–4:30 pm 624-0555
central systems: IBM, EPX, NVE, UZ, VX, VZ
web: <http://www.umn.edu/ccs>
Internet/E-mail, 8 am–5 pm ► **new hours** 6-7676
by e-mail for U of M: help@tc.umn.edu
Microcomputers, Distributed Systems
9 am–4 pm, 152 Shepherd Labs 6-4276
1-4 pm, 93 Blegen and 50 Coffey Hall
web: <http://www.micro.umn.edu>
NTS: 24-hour Repair Desk 5-0006
web: <http://www.nts.umn.edu>
Training Library, ADCS Short Courses 5-1300
web: <http://www.micro.umn.edu/ADCS/Training/>
Password: Forgot it? Call the Micro helpline 6-4276
Students go, in person, to any Micro helpline.

▼ General

Phone

Academic & Distributed Computing Serv. 5-1300
Computer Store, Williamson Hall 5-3854
CUFS 4-1617
Digital Media Center 5-5055
Disability & Computing Services voice/tty 6-0365
Engineering Services 7-4525
Data Custodians • Data Warehouse Databases
IDEA web page <http://notes.ais.umn.edu>
Facilities Mgmt, Kris Boike • SPAM 6-7896
Financial Sys Support, CUFS Help • CUFSRDB .. 4-1617
Grad School, Genny Rosing • GSRDB 5-9839
Human Res Info Ser, Gary Ogren • APSO 7-4341
Inventory Ser, Luke Madsen • INVENRDB 6-8217
Ofc of the Bursar, Sandy Pearson • STARS 6-8698
Ofc of Human Res, Nancy Highsmith • SDRDB 4-8374
Ofc of Planning & Analysis, John Kellogg 5-3387
• AARDB/MARDB • CLRDB • FARDB • RETDB • RRDB
Ofc Scholarships&FinAid, PhilMorgan • SCHOL 4-6586
Payroll, Ann Beattie • HERDB 4-3869
NTS (Networking & Telecom Services) Helpline .. 6-7800
Statistical Support, SAS 4-3330
SPSS, BMDP, Minitab (VX/EPX) 6-8366

▼ Dial-in Computer Access

Internet/SLIP: up to 28,800 bps (V.34) 627-4250
Internet/SLIP: ADI and ITE (with MKO) 3-0291
SecurID Access High Speed (V.32) 19200-N81 6-1061
2400-N81 (no parity/8 data bits/1 stop bit) ... 6-7770

▼ Internet Addresses

Quick Guide

LUMINA (Library) – web: <http://www.lib.umn.edu>
Telnet/TN3270: admin.ais.umn.edu
News Server: newsstand.tc.umn.edu
Internet/E-mail account management
web: <http://www.umn.edu/validate/>
Gopher (public can log in as gopher):
consultant.micro.umn.edu
OIT web: <http://www.umn.edu/oit>
UofM Twin Cities web: <http://www.tc.umn.edu>
Information Technology Newsletter
web: <http://www.umn.edu/oit/newsletter>
University of Minnesota Bookstores
web: <http://www.bookstore.umn.edu>

Last updated December 1996

Novell Support Connection

The Novell Support Connection CD is an electronic information base containing technical information that you need to install, maintain, and troubleshoot your Novell network and network applications. It is a comprehensive, single-source compilation of information from Novell and partner companies. Here's a sample:

- Technical Information on all of Novell's Products
- Technical Information Documents (TIDs)
- Novell Labs Bulletins
- Technical Publications
- Novell Application Notes
- Tech Training Aids
- Novell Buyer's Guide
- All patches and File Updates

Novell Consulting Services

Here are excerpts from the information for new subscribers:

Novell Consulting's Toolkit is published on CD approximately three times a year. It contains software tools that were developed and collected by Novell Consulting.

Consulting can be found here as well as a wide variety of time-saving tools and detailed documentation for Novell products including NetWare 4.1, ManageWise, GroupWise, and NetWare/IP.

The documentation includes proven design and implementation strategies and troubleshooting techniques based on the field experience of Novell's consultants. Also included are the latest presentations developed by consultants and presented at Novell Consulting Workshops around the world.

The online version of the toolkit is available at <http://www.novell.com/toolkit>. By taking advantage of the Web we can offer our partners and customers information updated on a more timely basis than is possible in CD format.

Our local (umn.edu) version of the toolkit is available at this (faster) URL: <http://www.info.oit.umn.edu/ncstools/toolkit/index.htm>.



The information on all these CDs is accessible via a personal computer running Windows and a NetWare client; you can access the Gartner Group CD from a Macintosh.

All the CDs are mounted on the new ADCS Information Server, also known as ADCS_INFO.

Gartner Group

This is the only technical CD accessible from a Macintosh. Here are excerpts from the information for new subscribers:

Gartner Group, Inc. is the world's leading independent advisor of research and analysis to business professionals making information technology (IT) decisions, including users, purchasers and vendors of IT products and services.

Its primary business consists of research and analysis of significant IT industry developments and trends, the packaging of such analysis into subscription-based products called personal advisory services, and the distribution of such products through various print and electronic media.

Accessing the CDs

Note: if you are unfamiliar with how to perform NetWare client operations, contact your Novell administrator for help.

Windows

For Windows-based CD resources, if you have an account in the UNIVERSITY_OF_MINNESOTA NetWare Directory Services (NDS) tree and are using a NetWare 4.x client (i.e., VLMs or Client32), follow the instructions in sections A and B.

In the sections below M: and N: are used as examples, but any drive letters that are free on your system can be substituted.

A. The simplest way is to map a network drive from a DOS prompt by typing the following (this works for DOS and Windows 95):

TechNet:

MAP ROOT

M: = .DM_MS_TechNet_Disk_1.CDs.Resources.ADCS.OIT.TC.UMN

MAP ROOT

N: = .DM_MS_TechNet_Disk_2.CDs.Resources.ADCS.OIT.TC.UMN

Novell Support Connection:

MAP ROOT

M: = .DM_Novell_NSC_Disk_1.CDs.Resources.ADCS.OIT.TC.UMN

MAP ROOT

N: = .DM_Novell_NSC_Disk_2.CDs.Resources.ADCS.OIT.TC.UMN

Gartner Group CD for Windows:

MAP ROOT

M: = .DM_Gartner_Group_Win_Disk_1.CDs.Resources.ADCS.OIT.TC.UMN

You can also browse the directory tree using the NetWare Users Tool in Windows 3.1x and the Network Neighborhood in Windows 95 and use one of those NetWare interfaces to do basically the same thing as the MAP commands.

B. After mapping the drives, follow these instructions installing the CD viewer application to your local drive, substituting whatever drive letter you mapped a drive to:

TechNet

1. Run M: \SETUP.EXE
2. Follow the installation instructions on your screen.

Novell Support Connection

1. Run M: \SETUP.EXE
2. Follow the installation instructions on your screen (perform a 'Standard' install).
3. After running setup, modify your Windows 3.1x program items or Windows 95 link files to point to the *.NFO databases on the correct network drive.

Gartner Group

You can access the CDs with a NetWare 3.x client, but we don't recommend doing so; the volume name changes when the CDs are updated. However, we will handle questions about this kind of access on a case-by-case basis.

You need the license number for the Windows version. If you are affiliated with the University we can provide it for you; send e-mail to <tech-cd-request@boombox.micro.umn.edu>. The license number will change every month.

1. Run M: \SETUP.EXE
2. When asked, supply the license number and confirmation.

You can use a Macintosh to access the Gartner CD if you have at least 10MB of free memory to run the client. Below are the steps for a Mac.

1. Connect to the *ADCS Information Server* in the *MicroCenter* AppleTalk zone (using the Chooser/AppleShare).
2. Make these three selections: Guest access, *Public Software*, Mac.
3. Open the *Applications/Gartner Group* folder.
4. Select *Install Gartner CD Client* (this will also install the required license).
5. Select and run the *Mount and Run Gartner CD* AppleScript application.

CD Change Schedule

All CDs will be updated on the third Saturday of every month; during that time the ADCS_INFO server will be unavailable. Do not expect to have access on that Saturday. After the CDs are updated, you will need to re-run the SETUP.EXE program to update your local configuration.

How to Contact Us

If you have questions or comments regarding these CDs or about accessing them, send your message to <tech-cd-request@boombox.micro.umn.edu>. You may also contact us at <cafe-supp@cafe.tc.umn.edu> or visit the CAFE web page at <http://www.cafe.tc.umn.edu>.

If you would like to test accessing these CDs using Windows 95, Novell NetWare Client32, and NetWare Application Launcher (which provides automatic update of your local configuration when CDs get changed), let us know.

■ This announcement was made possible partly through the efforts of these ADCS employees: Barry Schon, Matt Kauffmann, and Erich Bratton.

Technical Coordinators Program

A Service for University Departments



The Technical Coordinators Program was begun in 1992 to fill two needs: to provide forums to disseminate information among the University's computer support people and to provide better technical support on campus. Academic and Distributed Computing Services (ADCS) sponsors this program.

Who are Technical Coordinators?

Technical Coordinators are usually those people within a department to whom others go when they have a problem with their computer. They may have been hired to manage the department's computers or they may have acquired this role.

The Forums

The program consists of specialized forums, and each group has an e-mail mailing list to which coordinators can post questions and answer the queries of their fellow coordinators. Some groups meet periodically to discuss issues that interest them. They invite people to address a particular need. ADCS also makes some specialized tools or training available to help Technical Coordinators. The most active forums are discussed below.

Name Changes

In late November ADCS began moving all the former "techc-" e-mail lists handled by Networking and Telecommunications Services to the central system's LISTSERV service. This move eliminates the time-consuming task of individually adding and deleting names from the mailing lists. A byproduct of this change is that many lists' names needed to change because LISTSERV names cannot exceed eight characters. So we changed all the lists' names.

We also changed how we handle subscriptions to the "all technical coordinators" mailing list, formerly known as techc-all. To receive e-mail sent to that list you now must individually subscribe to it.

A New Forum: Web Developers

webdev-1@tc.umn.edu

This new technical forum is for web developers and webmasters. It covers issues beyond HTML authoring and design, such as Java programming, database interaction, and managing web servers. (This list also replaces the older techc-webmaster forum.)

A Change: The All Technical Coordinators Forum

tcoord-1@tc.umn.edu

If you wish to receive special announcements that are periodically sent to all Technical Coordinators, you should subscribe to this list.

Administrative Computing Connectivity

umadmin-1@tc.umn.edu

Those responsible for maintaining administrative computing within departments often need to combine information from many different sources and use that information to answer requests and fulfill University requirements for accountability. This group is a means for these users to ask for assistance from others who may already have solved some of these problems.

DEC Ultrix Administrators

ultrix-1@tc.umn.edu

This group looks at the unique needs of the Ultrix administrator.

Electronic Mail Services

email-1@tc.umn.edu

With the Fall 1992 introduction of free e-mail accounts for all students and staff at the University, many issues related to e-mail at the University need to be addressed. This group serves as a conduit to disseminate information from the central providers to all departments as well as to hear suggestions from the end users themselves. The intent is to provide a quality e-mail service to all members of the University of Minnesota community.

Micro & LAN Hardware and Networking Software

miclan-l@tc.umn.edu

The issues of getting departmental computers to communicate effectively are often very difficult. The task of maintaining departmental computer systems goes beyond simply installing software on a computer's hard disk and running it. It includes setting up and maintaining file servers, upgrading old software, providing the connections that allow computers to exchange information both within the department and across the campus backbone, finding security systems that are effective, and many other issues. This group provides the means to look at these issues and address problems.

UNIX Administrators

unix-l@tc.umn.edu

People in this group are responsible for the day-to-day administration and operation of UNIX-based computers. Because many of the problems encountered by UNIX System Administrators are similar, even across different hardware platforms, the collective knowledge of the people in this group can make it easier for all of them to provide stable, more usable software and systems to their users.

UNIX Workstation Hardware & Software

wkstns-l@tc.umn.edu

As workstations proliferate it becomes harder to keep up with what's new, and as more features are added the complexity of maintaining workstations increases. This group enables system administrators to get together and

talk about administration problems and hear how others have solved them.

How Do I Join the E-mail Lists?

To join (or quit) these lists send e-mail to

`listserv@tc.umn.edu`

To join the list use the standard subscribe command followed by the list's name and your name, for example:

`subscribe tcoord-l moe skitto`

Note that the names' of the e-mail lists end in the lowercase letter l (not the number one).

How Do I Join the Technical Coordinator Forum?

The Technical Coordinator program is available to University departments and organizations. If you are someone who should be designated as a Technical Coordinator, send e-mail to Phil Kachelmyer

`phk@umn.edu`

to request that you be added to the list that we maintain. This list is separate from the e-mail forums. You must subscribe directly to those forums in which you wish to participate.

■ Phil Kachelmyer, Mary Kelleher



We changed how we handle subscriptions to the "all technical coordinators" mailing list, formerly known as techc-all. To receive e-mail sent to that list you now must individually subscribe to it.

Data Warehouse FAQs (Frequently Asked Questions)

▼ *What kinds of data belong in a data warehouse?*

Data that comes from your mainframe or client/server computing systems, data that you use to manage your business, or any type of data that has value to your business.

The idea behind the data warehouse is to capture all types of data into a central location. Once this is done you have the ability to link different types of data together and turn that data into valuable information that can be used for your business needs, analysis, discovery and planning.

▼ *Why would I want to access the data warehouse when I have a mainframe computing system?*

Your computing system is set up to handle subject specific day to day business and transaction processing, such as payroll or course registration. The reports created in this type of system are specific to the subject matter. The benefits to putting your data into the data warehouse include:

- Merging subject specific data together to create information
- Standardizing data across the University
- Improving turnaround time for reporting
- Lowering costs because you can produce your own reports instead of costly, centrally printed and distributed mainframe reports
- Sharing data or allowing others to easily access your data will free staff from the tasks of extracting data and reporting for other departments or colleges

▼ *What's metadata? What's a data dictionary?*

Metadata is data about data. Metadata gives you data element definitions, data layouts, and information about the data element's location. Data elements are the smallest unit of data that can be described, for example the zip code field within an address database record.

The University's data warehouse refers to their metadata as data dictionaries. You can access the data dictionaries on the IDEA web page <<http://notes.ais.umn.edu>>. Click on the Information button, then click on the Data Element Dictionary for the database of your choice.

■ Ann Warner, Integrated Systems Solutions

Update: Improve the Data Warehouse Project

The Grants Management Project's Improve the Data Warehouse team is currently working on three subprojects:

- Improvements to the payroll/human resources portions of the warehouse
- Additional grant data
- Balancing the CUFSRDB data with the Operational CUFS system

Early 1997 Rollouts

The team continues to focus on improvements to the payroll/human resources portions of the Data Warehouse. Using information gathered from customers in August and September, the team developed a tentative design for new payroll-related tables. This design includes payments, encumbrances and fringe benefits by individuals, as well as the ability to link these payments to specific CUFS transactions.

The team is implementing this design in November and December. Roll out of the improvements will take place early in the new year.

Proposal and Award Data

With the assistance of ORTTA (Office of Research and Technology Transfer Administration) personnel, the expansion of proposal and award data available in the warehouse is almost complete.

Additional data columns were added to the existing `cufs_grant_propawd` and `cufs_grant_desc` tables, improving their value. A new table containing historical proposal and award data about grants that are complete or grants that did not receive an award was also added.

FSS Implementation

Individuals from Financial Systems Support (FSS) implemented a process for comparing balances in the CUFSRDB tables with the operational CUFS system after each CUFSRDB update. This process allows FSS to assure customers of the reliability of the CUFSRDB data. It also alerts FSS when problems occur, enabling earlier resolution and customer notification.

■ Joe Sullivan, Integrated Systems Solutions

New Databases Available this Fall from the Libraries

Nancy K. Herther, Integrated Information Center of the University Libraries



This Fall over 50 databases are available for searching free of charge to all current University staff, students, and faculty. Ten of these databases are new or changed in format for this year. Below are a brief descriptions of each database.

- **CHICANO DATABASE** ► provides a selective index of books, articles and other materials relevant to Chicano/Latino studies. All types of materials on Mexican-American topics and Chicanos are given. Since 1992, the database has also included material on broader Latino experiences, Puerto Ricans, Cuban Americans and Central American immigrants. The database covers 1967 to the present.
- **DATATIMES** ► is a vast collection of 136 newspapers, including 92 regional U.S. and another 34 from financial and regional sources outside the U.S. The coverage is from February 1996 to the present and the database is updated daily for currency. Included is the *StarTribune* for important local coverage of issues and events.
- **ECONLIT** ► from the American Economic Association, provides selected indexing of books, dissertations, over 400 journals and working papers related to the field of economics. The database is updated monthly and covers 1969 to the present.
- **EDUCATION ABSTRACTS** ► is the on-line version of *Education Index* from H.W. Wilson with abstracts for more recent entries. The database covers over 400 English-language periodicals and yearbooks, published in the U.S. and elsewhere. Indexing goes back to June 1983, abstracts are given for materials added since August 1994. The database is updated monthly. See sample record in Figure 1.
- **EST ENGLISH SHORT-TITLE CATALOG** ► is an index of English language publications from 1473 to 1800, providing bibliographic access to these often rare materials.
- **GEOREF** ► from the American Geological Institute, covers earth sciences and geology with nearly two million records. It is updated bi-monthly and covers 1785 to the present for North American topics and from 1933 covers the world.

- **HUMANITIES ABSTRACTS** ► also from H.W. Wilson, is the important *Humanities Index*, covering archaeology, art, classics, film, folklore, linguistics, performing arts, philosophy, religion and other topics. The database covers over 300 journals, with updates each month. From 1984 to the present, citations include indexing only, abstracts are given for all materials added since March 1994. See sample record in Figure 2.
- **MATHSCIENET** ► available over the World Wide Web, covers both pure and applied mathematics from *Mathematical Review* and *Current Mathematical Publications* from 1940 to the present. For access, check out the Libraries' web page <<http://www.lib.umn.edu>>.
- **RUSSIAN ACADEMY OF SCIENCES** ► covers books and articles from this prestigious group from 1992 to the present in all areas of research.
- **RILM** ► from the Repertoire International de Literature Musicale, is the on-line version of the printed index, *RILM Abstracts of Music Literature* and covers the international literature of music from 1988 to the present. The database contains about 200,000 citations and is updated quarterly.

These are just the newest additions to our catalog of on-line resources which we license from a variety of vendors for your use. Check with a reference librarian or take a few minutes to look through the complete listing of databases in the INDEXES section of LUMINA.

Accessing LUMINA

If you need assistance getting access to LUMINA or using our resources, please contact any member of the Libraries staff or call me. LUMINA is available by telnetting to the "admin" address below or through the Libraries' web page at the "lib" URL below

admin.ais.umn.edu
<http://www.lib.umn.edu>

■ Nancy K. Herther, Manager of the Integrated Information Center of the University Libraries, can be reached at room 7 Walter Library, East Bank; 624-2020; Internet: <nherther@iic.lib.umn.edu>.

Figure 1: Education Abstracts – Sample Record

TI: Funding by numbers provokes Greek university fury
AU: Marseilles,-Makki
SO: The-Times-Higher-Education-Supplement. no1239 (Aug. 2 '96) p. 8
PY: 1996
IS: 0049-3929
LA: English
AB: In Greece, university chiefs have voiced their anger at the education secretary's suggestions that future funding of universities should be based on student numbers and that teaching staff should be assessed for promotion every five years by foreign professors. The proposals were revealed quite unexpectedly at a meeting between the prime minister and the university chiefs that was called to discuss the problems in higher education.
DE: Colleges-and-universities-Finance-Greece; College-professors-and-instructors-Rating
DT: Feature-Article
AN: 96021887

Figure 2: Humanities Abstracts – Sample Record

TI: Arguing along the slippery slope of human embryo research
AU: Freeman,-Jeanne-Salmon
SO: The-Journal-of-Medicine-and-Philosophy. v. 21 Feb. '96 p. 61-81
PY: 1996
PD: bibl
IS: 0360-5310
LA: English
AB: One frequent argument in the debate over federal funding of human embryo research is the slippery slope argument. Slope arguments can be of several types: either logical, empirical, or full (a combination of logical and empirical slope arguments, with an additional psychological premise). A full slope argument against human embryo research suggests that funding embryo research could undermine current protections for human subjects research, erode respect for persons with disabilities, and encourage eugenics practices. While the Panel commissioned by the National Institutes of Health to issue funding guidelines regarding human embryo research acknowledges some slippery slope concerns, the Panel's final report fails to address such concerns in any depth. Given this failure seriously to address these valid concerns, federal funding of embryo research should not proceed at this time. Reprinted by permission of the publisher.
DE: Human-embryoresearch; Medicalpolicy
DT: FeatureArticle
AN: 96014231



**For a complete listing of
databases, look in the
INDEXES section of LUMINA.**



CNET Reprint

This education article contains excerpts from a CNET.COM article. CNET—The Computer Network—is located on the web at <http://www.cnet.com/>.

This article's URL begins at <http://www.news.com/News/Item/0,4,4534,00.html>; the "Students get hard lesson" portion continues at <http://www.news.com/SpecialFeatures/0,5,4598,00.html>. You can sign up to receive CNET Digital Dispatch by e-mail; it's a weekly guide to CNET.COM and CNET TV.

Internet Access Changes at the University of Minnesota

In Winter Quarter the University plans to begin a revised free access policy. (See "Changes to Modem Access" in our October 1996 newsletter.) Members of the University who use telephone lines to access the Internet are now allotted up to 30 hours of use per month at no charge. They can purchase additional hours of dial-in use for \$4 per month for each additional 0-30 hours of use. We hope this change, along with the growth of the network access modem pool to 1600 modems, will help keep busy signals down.

Education on the Internet

Jane Black
CNET 10/18/96

Students get hard lesson

To keep up with the rising costs and competition for online usage, some universities have begun to charge students for Internet access.



As products of the Information Age, many college students have come to think of access to campus computers and the Internet as a natural part of their education. But universities, laden with rising costs and increasing demand for online connections, are beginning to dispense some harsh lessons in reality: asking them to pay for it.

Universities began giving students Internet access as a courtesy when professors and a few techno-savvy students were the only ones on the Net. Today, with both computer experience and time on their hands, students use the Net not only for email and research but also to shop, watch movies, and even fall in love.

This raises a sensitive question: Should universities, especially those maintained with taxpayer money, pay for all this by themselves? The answer at a growing number of campuses is no.

"It's just not fiscally responsible for the university to provide network access to all students, all the time," said David Golden, an information technology consultant at San Francisco State University. "Whatever we do, it will never be enough. We can never provide enough modems and other infrastructure."

As the number of college students populating the virtual world skyrockets, administrators are finding that university budgets simply cannot keep up with the campus demand for Net access. So, to the outrage of many who are already paying record-high tuitions, some universities are pushing students to pay for commercial Internet service out of their own pockets. ...Netcom has agreed to give students at the University of California at Berkeley unlimited monthly usage for \$5 for the first month and \$14.95 thereafter.

Universities provide students Internet access in two ways, through computer labs on campus or modems at homes or dorm rooms. At the labs, students work at computers that are hooked directly to the university server by a T1 connection that allows fast data transfer and download time.

To connect students from home, universities must maintain a large number of modems – or modem pools – of their own. These modems are linked to a "switch" or "router," which is plugged in to the university server and gives students access to university information such as library

catalogues, as well as the Internet.

Both options have economic limitations, given the student demand. San Francisco State, for example, has 19 computer labs, some of which are open 24 hours a day. But the lines are long and growing.

Don Danner, computing services lab manager, says the wait runs between 20 minutes and one hour unless you come between 1 a.m. and 5 a.m. This despite the two-hour limit of computer use and the ban of Internet Relay Chat and game environments such as MUD (multiuser dungeon)

Trying to log on from home is even worse. San Francisco State maintains a pool of almost 200 modems for its more than 30,000 students and 1,800 faculty and staff.

"It's the busy signals," said Dylan Woon, a user consultant at the 24-hour lab. "The school can't provide enough access." ...Before, they were only using it for email, which at most took a few seconds to download. Now, students log in to the server and surf the Web for hours – admittedly not always for research.

Cliff Frost, director of data communications and network services at Berkeley, said... "There are huge modem-access pressures and problems all over the country. And we have not found anyone who is completely happy with their situation."

■ © 1996 CNET Inc.

News Briefs

Internet/E-mail HelpLine: Improvements to 626-7676



Good news. Beginning Winter Quarter the Internet/E-mail HelpLine will be open longer. The new hours are 9 am to 5 pm, Monday-Friday. When you call the 626-7676 help line you will also get a faster response.

As Internet and e-mail usage has grown and more people add modems to their computer configurations, the number of calls to the Internet/E-mail HelpLine has also increased. In order to meet this growing demand, Academic and Distributed Computing Services hired more consultants and increased the number of phone lines. Those who have questions about setting up and using their University Internet account should call this help line first. Our consultants support the University's Internet kit (a \$6 package) and know about updates to the kit. They can help with simple questions, such as how to look-up your e-mail address, and more complex ones, such as how to resolve modem and direct (Ethernet) connection problems. They can even help you use Internet services besides e-mail, and, of course, they know a lot about e-mail.

In addition to exploring ways to better serve people who call the Internet/E-mail HelpLine, we're also working to improve the availability of services on the Microcomputer HelpLine at 626-4276. ■ Simin Hickman, Mary Kelleher, Academic and Distributed Computing Services

Engineering Services Settles In



The Engineering Services Department is settled in their new location at 2716 Summer Street NE in Minneapolis. Check our web site at <http://www.micro.umn.edu/es/> for upcoming events, hard drive upgrades, memory upgrades, and other hardware news as it becomes available. ■ Joyce B. Johnson, Engineering Services

Financial Reports on the Web



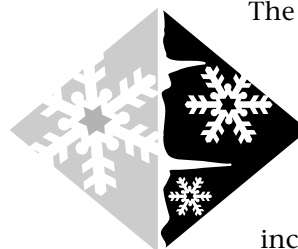
Training Services provides financial management and CUPS training for University of Minnesota faculty and staff. They are sponsoring open labs for anyone interested in viewing the financial reports on the web. You can come to a lab at your convenience during the time frames indicated in Table 1. Trainers will be available to help you view or interpret the on-line reports.

Table 1: Open Labs
Dates Times

Friday, December 6	10 am-noon
Tuesday, December 10	8 am-10 am
Wednesday, December 18	2 pm-4 pm
Friday, January 3	10 am-noon
Wednesday, January 8	2 pm-4 pm

Registration is not required. Labs are held in room 543 in the West Bank Office Building. ■ Submitted by Mary Ritzer, Training Services <<http://training.finop.umn.edu/>>

National Academy Press: Books on the Web



The National Academy Press has loaded over 900 of its book publications from the 1980s and 1990s for free viewing at <http://www.nap.edu/readingroom/>. A variety of document formats are used including html, PDF, postscript, ASCII, and DocuWeb. While this publisher emphasizes the physical, life and engineering sciences, it also covers some social and behavioral sciences, industry and economics, and public policy areas. ■ Nancy Herther, University Libraries

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Published monthly by the **Office of Information Technology**
Mary Kelleher, Editor, oitnsltr@tc.umn.edu

Electronic versions of each issue will be available as HTML (web) and PDF (Acrobat) documents. Look for them on the Office of Information Technology's web site at <http://www.umn.edu/oit/newsletter>.

Information Technology Newsletter

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