

Computer and Information Services Newsletter

This newsletter is an information resource for the University of Minnesota.

Volume 3, Number 12

This June 1994 issue may be your last one.

It's Purge Time

To keep our costs down and responsibly use University resources, we completely purge our newsletter mailing list once a year. We're preparing for a purge now.

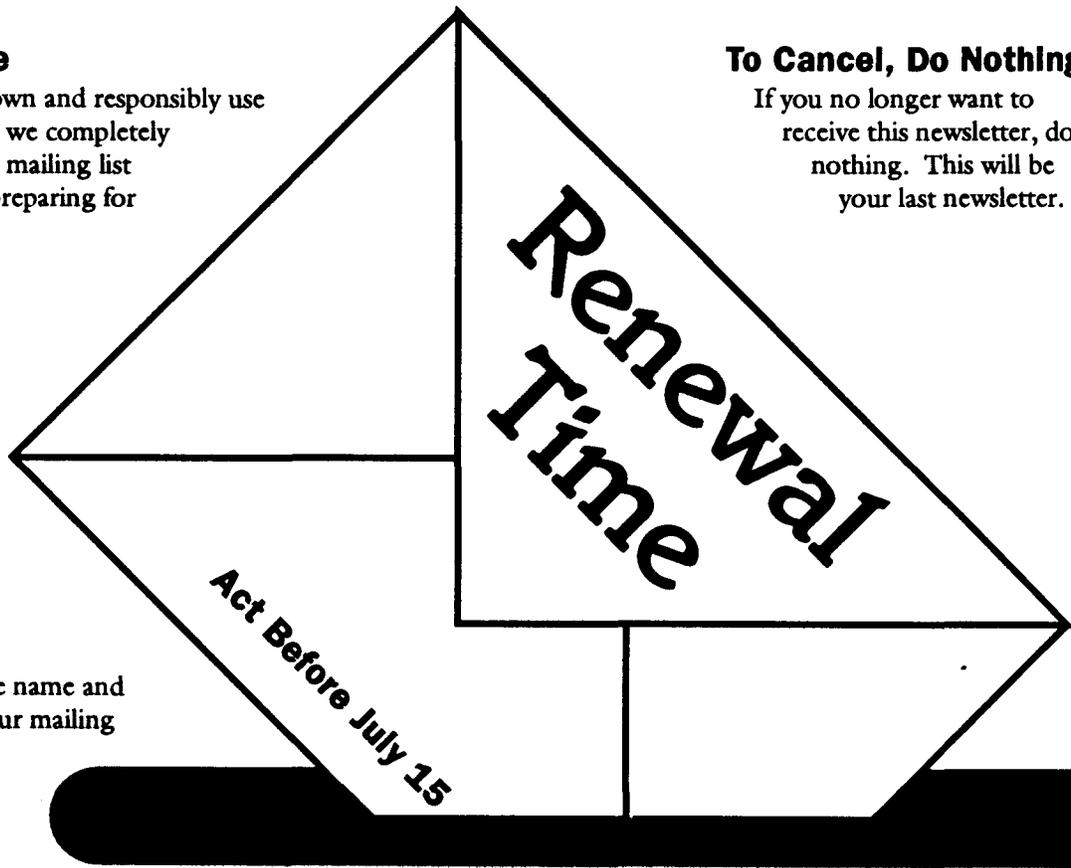
To Continue, Act Before July 15

If you want to keep your name on our mailing list, return your current mailing label to us before July 15.

If needed, update the name and address shown on your mailing label. You can use the coupon on the back to tell us whether you want your subscription continued as is or you want some part of it changed.

To Cancel, Do Nothing

If you no longer want to receive this newsletter, do nothing. This will be your last newsletter.



Each mailing label has a unique ID number. This number will help us process renewal requests.



June 1994



Printed on recycled paper;
mailed with Addressing and Mailing's Cheshire recyclable labels.

▽ Features

Central System News

- All Grants Accounts Expire June 30 270
- NETNEWS to be Removed from VM1 270

Get it on Gopher *

- Gopher is Still Growing 281

Minuet for Multiple Users 277

Tips

- Unsubscribing from a LISTSERV List Server 274
- Review: Accessing Gopher Servers Directly 280

University Libraries

- A Veronica for Minnesota 271
- Who? What's veronica? 271

▽ Book Center News

Use Gopher for 24-hour Service 278

Recent Apple Changes

- PowerBook 520, 520c, and 540c 279
- PowerBook Duos 280, 280c, 230 279

Price Drop: Supra Modem for PCs now \$129 279

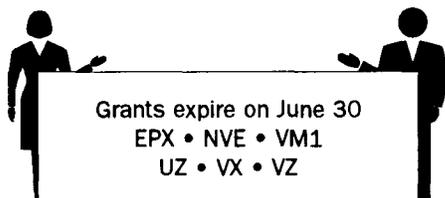
Recent Price and Product Changes: Apple Products 280

* When the *Computer Facilities* schedule for Summer is available, we will put it on Gopher. To see the Computer Facilities schedule for Summer, follow this Gopher path: /Computer Information/Computer & Information Services Newsletter/Computer Facilities.

Central System News

▼ All Grant Accounts Expire June 30

Qualified central system users can apply for grants to cover some computing-related costs.



If you have a grant account on a central system, now is the time to renew your account for the fiscal year 1994-1995. Current grant account owners should have received a renewal form in the mail. To ensure uninterrupted service, please return your forms promptly.

Need a Renewal Form?

If you have not yet received your renewal form, you can call 626-8366 or call the same number you call to open an account on one of our central systems.

▼ St. Paul Computing Services

NETNEWS to be Removed from VM1

In an effort to use resources more effectively, the NETNEWS Newsreader utility will be removed from the IBM central system (VM1) on June 15.

Use the Central News Server

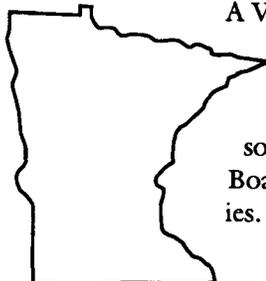
The Central news server

`news.tcc.umn.edu`

offers a much expanded list of newsgroups. Previous issues of our newsletter have featured news readers for the IBM PC (Minuet, December 1993), the Mac (Nuntius, January 1994), and for the Gold and Maroon systems (March 1994).

A Veronica for Minnesota

And Other Services Provided by the University Libraries
William DeJohn, Director, MINITEX Library Information Network



A Veronica is now available at the University of Minnesota, funded by the MINITEX Library Information Network, a program of the Minnesota Higher Education Coordinating Board located in the University Libraries. In partnership with the University of Minnesota's Computer Information Service, MINITEX funded the

veronica server in order to improve access to Gopher Space for the increasing number of Internet users in Minnesota. Veronica stands for "Very Easy Rodent-Oriented Net-wide Index to Computerized Archives."

Preferential Service for Minnesota

This Veronica server is made possible by an appropriation from the Minnesota State Legislature to the Minnesota Higher Education Coordinating Board for the MINITEX

program. Thus, this server gives preferential service to folks with Internet addresses within the state of Minnesota. Others are welcome to use any excess capacity of this server but Minnesota users will have first access. If you have comments or questions about this server, please send them via e-mail to: gopher@boombox.micro.umn.edu or to WDEJO@VX.CIS.UMN.EDU.

Three Ways to Access MINITEX Veronica

Access to the MINITEX Veronica:

1. Through Gopher, connect to the machine soundgarden.micro.umn.edu, port 70
2. Through Telnet, connect to the machine consultant.micro.umn.edu and log in as the username "gopher"
3. Through the University of Minnesota's Main Gopher use existing menus

Who? What's veronica?

very easy rodent-oriented netwide index to computerized archives

As noted in last month's *Internet Gopher is Growing* article, Gopher servers are very rapidly proliferating around the world. Since so much information is becoming available, people frequently need help locating information on a specific topic. To help navigate through the thousands of Gopher servers on the Internet, the University of Nevada developed veronica, an Internet Gopher companion.

Veronica is software that maintains an index of titles of Gopher items and provides keyword searches of those titles. A veronica search typically scours the menus of all the Gopher servers and returns the results to your computer

screen. You then see a set of Gopher-type data items displayed in the form of a Gopher menu. To access an item, you simply select its name from the menu.

Several sites around the country run veronica servers. You can access these veronica services by starting at our Gopher's home directory, and following this path:

/Other Gopher and Information
 Servers/Search titles in
 Gopherspace using veronica

The search veronica section has help files and announcements as well as links to veronica servers. You can begin by selecting any veronica server. If it gives the message "Too many connections" or "Cannot connect," try one of the

other servers. After you choose a search item, you will be prompted to enter a keyword(s) to define what you are looking for. It does not matter whether the word is upper- or lowercase. Since the same information is often stored on many different Gopher servers, searches frequently come up with duplicate entries.

You can compose simple and more complex searches. Read *How to compose veronica queries* for more detailed information.

MINITEX Mission

The mission of the MINITEX Library Information Network adopted by MNHECB is to "expand access to information resources," "provide effective delivery of needed information," and use "conventional and innovative procedures and technologies."

MINITEX Provides a Variety of Services

The MINITEX Library Information Network is funded by the Minnesota State Legislature to provide a variety of services to post-secondary libraries, public and private, and state agency libraries in Minnesota. Through contracts with the MNHECB, the University's MINITEX program also provides services to Minnesota public libraries and to libraries in North and South Dakota. In addition, reciprocal agreements exist with libraries in Wisconsin.

Services provided by MINITEX includes providing over 160,000 photocopies and book loans to libraries throughout Minnesota, North Dakota, South Dakota, and Wisconsin. This makes it possible for anyone in Minnesota to obtain a book or a photocopy held by the University Libraries or a library in one of the other states. Academic and state agency libraries can transmit requests directly to the MINITEX Office in Wilson Library. Public libraries work through public library systems before accessing MINITEX. All libraries exhaust local holdings of local academic, public, special and school libraries in their geographical area whenever possible before a request is sent to the MINITEX office.

MINITEX services include providing overnight delivery from the MINITEX Office to over 100 libraries in the three state region, Monday through Friday each week of the year. This includes overnight delivery between the University of Minnesota and the University of Wisconsin, Madison. This enables materials being borrowed or lent between two institutions to travel overnight in order to reach people who need them as soon as possible.

Additional services include providing staff support and training for the Online Catalog Library Center (OCLC) to 164 libraries in the three-state region. OCLC is a database of over 30 million records with holdings of libraries worldwide. University library users are more familiar with it as the WORLDCAT on the FirstSearch menu in LUMINA. WORLDCAT database is actually a clone of the OCLC database established by participating libraries over the last 20 years.

This server gives preferential service to folks with Internet addresses within the state of Minnesota. Others are welcome to use any excess capacity of this server but Minnesota users will have first access.

MINITEX staff also provide backup reference services for Minnesota public libraries when they cannot answer a reference question with local resources. This is supported by the MN Office of Library Development and Services. MINITEX also developed and supports MULS, the MINITEX Union List of Serials which provides holdings information for all the serials (magazines and other publications) of over 125 libraries in the three states. The University Libraries' holdings comprise 27% of the holdings in MULS. The MINITEX staff provides workshops, forums, cooperating purchasing services and acts as a broker for several database vendors in order to obtain more favorable licensing arrangements from vendors and to help libraries stretch their available dollars.

Since 1988, MINITEX has helped libraries save over \$500,000 in the three state region. Currently, MINITEX is the fiscal agent for reference citations of 2,500 journals and magazines of which 1,300 journals will have full text ASCII files available. Those files are available here at the University as well as in the MSUS/PALS library system in Minnesota and the private college libraries in Minneapolis/St. Paul, and two public library systems in Southern Minnesota, SELCO, and Traverse de Sioux library systems.

The appropriations increase MINITEX received from the Minnesota Legislature for FY 1994 and FY 1995 was for meeting the increasing demands for services and also to license various online and/or CD-ROM databases and provide support when possible to participating libraries to increase access to information, especially the full content of the material.

To serve more people in Minnesota, additional projects are being funded involving the University Libraries:

1-800-U-LUMINA (1-800-858-6462) Non Metro Region
Metro Region: 625-6009 (up to 2400 baud)
624-7539 (9600 baud and up)
Communications software must emulate VT100

MINITEX is funding an 800 line to LUMINA. The purpose of the 800 line is to ensure for Greater Minnesota residents equitable on-line access to the largest library collection in Minnesota, the University of Minnesota Libraries.

If callers are not affiliated with the University, they can obtain the materials through their local public and academic libraries, all of which participate in the MINITEX Library Information Network. It provides access to the public service menu and to the LUMINA menu.

If you are a member of the University community and have the proper E-mail account and password, it provides access to all the files you have access to when you are on campus and using the available terminals.

Government CD-ROM

A research and development project, funded by MINITEX, has been undertaken with the University Libraries and Computer and Information Services (CIS) to put information stored on US Government CD-ROMs on Internet Gopher so it can be accessed by the University community, library staffs and other individuals in Minnesota via the Internet. This will include census data as well as other government documents. We hope to have this project available before June 1994 so it can be evaluated. Because this information is not copyrighted, we are hoping to avoid copyright questions by using government documents.

ERIC

A research and development project, also funded by MINITEX, has been undertaken with the University Libraries and CIS to use Internet Gopher Plus software with a search engine still to be selected to put ERIC up as a database that can be searched in Minnesota through the Internet. If successful, this will provide a viable search engine for the University community, library staffs and other individuals in Minnesota to search the ERIC database.

ERIC is produced by the US Department of Education and contains journal articles and abstracts of documents in the field of education, updated monthly. There are over 827,599 items in the database as of March, 1994. This database is not copyrighted.

Gopher Manager

MINITEX and the University Libraries Public Services are jointly funding a full-time Gopher Manager to help both MINITEX and the University Libraries with several Gopher and Internet-related projects. It is also hoped that this person will be able to offer assistance to other libraries seeking to set up Gophers in Minnesota as well as work closely with the CIS staff.

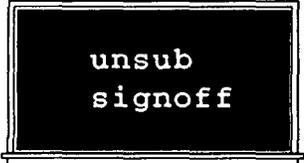
For More Information

For more information, contact the author at wdejo@vx.cis.umn.edu or write him at MINITEX, Wilson Library, West Bank.

MINITEX was founded by the University Libraries in 1969, with the assistance of grant funding from the Minnesota Office of Library Development and Services and the Louis Foundation. It received its first legislative support in 1971.

The MINITEX Library Information Network is funded by the Minnesota State Legislature to provide a variety of services to post-secondary libraries, public and private, and state agency libraries in Minnesota.

Tip: Unsubscribing from a LISTSERV List Server



```
unsub
signoff
```

Many people have used their University Internet accounts to subscribe to electronic mailing lists, such as those maintained by LISTSERV software. If you're not going to read your mail all summer or for any extended period of time, it is a good idea to unsubscribe from the list.

The Easy Scenario

Generally, unsubscribing is easy as long as you remember a few simple rules. The first rule is that to unsubscribe you do *not* use the address that you use to correspond with the list, for example

- the fly fishing list at flyfish@umab.bitnet
- the Microsoft Windows list at win3-l@uicvm.bitnet

Instead you use the LISTSERV address at the same node, for example

```
listserv@umab.bitnet
listserv@uicvm.bitnet
```

The second rule is that the LISTSERV software only understands a few commands such as

```
unsub flyfish
signoff win3-l
```

These signoff and unsub examples tell the LISTSERV that you (the message's sender) want to unsubscribe from a specific list, that is flyfish and win3-l. Since most LISTSERVs manage more than one list, it is essential that you tell the software the list's name.

Most LISTSERVs will respond to your request and remove you from the mailing list within a few hours.

How LISTSERV Knows Who You Are

When you subscribe, unsubscribe, and otherwise correspond with a LISTSERV, you do not type in your E-mail identification. The LISTSERV gets that information from the "header" that is automatically sent along with each message. The header is usually invisible to you. Figure 1 shows a sample header; a partial "from line" is shown below

```
From: Virginia Relf <VIRRELF%VTVM1.BITNET
```

The header also shows you the path(s) the message took to reach you.

Figure 1: A Sample Header

```
Received: from vx.cis.umn.edu by boombox.micro.umn.edu; Wed, 9 Mar 94 12:21:58 CST
Received: from KSUVM.KSU.EDU (MAILER@KSUVM) by VX.CIS.UMN.EDU (PMDF V4.2-13
#2574) id <01H9RKNTKAYODZ6XE1@VX.CIS.UMN.EDU>; Wed, 9 Mar 1994 12:13:31 CDT
Received: from KSUVM.KSU.EDU (NJE origin LISTSERV@KSUVM) by KSUVM.KSU.EDU
(LMail V1.1d/1.7f) with BSMTP id 5939; Tue, 1 Mar 1994 18:24:15 -0600
Date: Tue, 01 Mar 1994 09:51:03 -0500 (EST)
→ From: Virginia Relf <VIRRELF%VTVM1.BITNET@VX.CIS.UMN.EDU>
Subject: Research Abstracts
Sender: "Va Tech Horticulture Dept. - Monthly Releases"
<HORT-L%VTVM1.BITNET@VX.CIS.UMN.EDU>
To: Multiple recipients of list HORT-L <HORT-L%VTVM1.BITNET@VX.CIS.UMN.EDU>
Reply-To: VIRRELF%VTVM1.BITNET@VX.CIS.UMN.EDU
Message-Id: <01H9RNIX1TOGDZ6XE1@VX.CIS.UMN.EDU>
Content-Transfer-Encoding: 7BIT
```

Troubleshooting

If you follow the unsubscribe instructions but they don't work, check your spelling. If everything is spelled OK, you're probably having trouble because you are not a typical subscriber.

Two common troublespots are: people who have more than one E-mail address or whose E-mail address has changed.

More Than One E-mail Address

Some people at this University have two E-mail addresses: one because of their employee status and the other because of their student status. To avoid logging onto each account separately to retrieve mail, people can make one address their "preferred" address and have mail from the other address forwarded to their preferred address. For our example we'll call the preferred address DOLLARS and the other address CENTS.

A minor problem can arise if you initially subscribe to a list using the CENTS address. The LISTSERV automatically adds the CENTS address to its list of subscribers and sees that you get postings from the list. However, at some point you use the University's "forward" feature to make DOLLARS your preferred address. This does not interfere with receiving postings from the LISTSERV because mail addressed to CENTS is automatically forwarded to DOLLARS. In this scenario you will probably send the correct unsub command from the "wrong" address, so the LISTSERV cannot carry out your order. The minor problem is that the LISTSERV reads the DOLLARS address from your header and cannot match that address with the addresses it has for subscribers.

You can unsubscribe by logging onto your secondary account (CENTS) and sending the unsubscribe message from that account. Other options are described below in the *Solutions* section.

Your E-mail Address Changes

Many people at the University did have their E-mail address changed in the Fall of 1993. Previously people did not have the word gold or maroon as part of their E-mail address. Instead their addresses contained the words student or staff, for example

ENUF1234@STUDENT.TC.UMN.EDU

The University plans to forward mail sent to the old student and staff addresses to the newer maroon and gold addresses indefinitely. Since the old names still work, people get whatever mail is sent to the old address. The plan works smoothly until people try to unsubscribe and the LISTSERV software cannot carry out their order. These people run into the same problems described in the *More Than One E-mail Address* section above.

Solutions

If you know exactly what E-mail address you used to subscribe to a list, you can send mail directly to the list's owner and ask the owner to remove you from the list. This may take awhile. The list owner may be on vacation when you send the message or may handle requests from the list on, say, a weekly basis.

But what if you don't know the list owner's address or the exact address you used to subscribe? As we've noted in other articles, the LISTSERV that manages many discussion groups also maintains other files, such as one called REVIEW. A REVIEW file records the name and E-mail address of the list's owner and the same information for the list's subscribers. This file will probably give you the information you need to unsubscribe; an abbreviated sample is shown in Figure 2.

To get the REVIEW file, E-mail a one line, two-word command to the LISTSERV address. The form of that address and command is

```
listserv@node  
review listname
```

For example

```
listserv@mars.xyz.edu  
review zucchini
```

This will work for most LISTSERV nodes, even though some of them differ in how they are set up.

Finally, send E-mail to the owner of the list asking her to remove you from the list or to change your E-mail address if you don't want to completely unsubscribe.

Figure 2: An Abbreviated Sample of a Review File

```

* ZUCCHINI
*
* The purpose of ZUCCHINI is to share recipes and
...
* Review= Public                Subscription= Open,Confirm
* Notify= No                    Files= Yes
* Notebook= Yes,X1/vmsysu:crovo.log.zucchini,Weekly,Public
* Digest= Yes,Same,Daily,,size(1500)
* Validate= Store only          Ack= Yes
* Confidential= No              X-Tags= Yes
* Errors-To= zeek@ukcc.uky.edu  Default-Options=Repro
* Reply-to= List,Respect        Stats= Normal
* Daily-threshold= 250          Send= Public
*
* Owner= Zeek@ukcc.uky.edu
...
* Total number of "concealed" subscribers:      37
* Total number of users subscribed to the list: 1078 (non-"concealed" only)
* Total number of local node users on the list:  19 (non-"concealed" only)
*
...
alic0065@STUDENT.TC.UMN.EDU      Paul Aliceson
zip5741@ACAD.CSV.KUTZTOWN.EDU    Bitsy Greenwell
beaches@AOL.COM                  John Johnson
lmdoor@ATTMAIL.COM              L. M. Doorington
GARDEDST@BROWNVN.BROWN.EDU      Brown Local Dist.
smurph@CC.UMANITOBA.CA          Shawn Murphy
J.Just@GEOGRAPHY.HULL.AC.UK     Joy Art Justice

```

A Fine Point

Remember, LISTSERV is designed to run without human intervention, and it recognizes only a few commands. Since some E-mail programs let you automatically append signature information to your messages, if you've set up such an automatic signature, it is a good idea to suppress it when you correspond with a LISTSERV. However, if you do include your signature, the LISTSERV will probably just tell you that "John Doe" — or whatever you put in your signature — is an unknown command.

Generally unsubscribing is easy as long as you remember a few simple rules. The first rule is that to unsubscribe you do *not* use the address that you use to correspond with the list.

Minuet for Multiple Users



We've prepared instructions for Minuet users who find themselves in the following scenarios:

Scenario	"Operating" System		Connection	
	DOS	Windows	Ethernet	SLIP
1. Multiple User	x	x	x	
2.	x		x	
3.	x	x		x
4.	x	x		x

Multiple Users

As E-mail becomes more popular, we are seeing more situations where several people must share the same computer. Those in that situation frequently ask:

What do we need to do to have many users of Minuet on the same computer without placing multiple copies of Minuet on the hard disk?

The exact answer depends on which of the four scenarios listed above applies to your situation. We've prepared "cookbook-type" instructions for each scenario. You can pick up the instructions in any of our Microcomputer HelpLines or on our Gopher server. Here's the Gopher path:

Home Gopher Server/Computer Information/
E-mail/Minuet for Multiple Users

DOS and Batch Files

We've printed one of the procedures below. You can easily use the *EDIT* program that comes with DOS 5 (and later versions) to create the batch file mentioned in step 4 for this scenario. (Batch files must be ASCII files; these files are sometimes called plain text files.)

DOS and Multiple Users with an Ethernet Connection

A. Set up Minuet

1. Establish a DIRECT Internet connection for the computer.
2. Register the computer with Networking Services for BOOTP service. This will allow for the automatic set-up of required

networking configuration parameters (namely: IP, Net Mask, Name Servers, and Gateways).

3. Include

`c:\minuet`

in the path statement.

4. Create the following one-line batch file and name it *min.bat*

`c:\minuet\minuet/p=c:\mail\%1`

B. Set Up Each User

1. Assign a unique 3-letter ID code to each user. A user's initials work well for this purpose. For example,

Mortimer A. Snerd MAS
Jane B. Doe JBD

2. The user types

`min HisOrHerInitials`

for example

`min JBD`

Minuet will automatically establish a separate subdirectory for the user in

`c:\mail\`

3. Set up Minuet as usual. That is, fill in the E-Mail Address and Password fields in the Setup/User dialog box. Note: leave the Subdirectory for mail field empty.

4. Each time someone wants to run Minuet, they type

`min HisOrHerInitials`

To set up a second user, quit Minuet and type

`min XYZ`

where "XYZ" is the name or initials of the second user. (A new subdirectory is automatically created.) Go to the Setup/User menu in Minuet and enter the E-Mail Address and Password as usual.

That's all there is to it!



Book Center Computer News: 625-3854

You can charge your purchases on your MasterCard, Visa, and Discover accounts.

▼ 30-Day Money Back Guarantee



The Book Center offers a 30-day money back guarantee on all hardware and on any software whose seal has not been broken. The offers listed here are made to University departments, employees, and students, and are subject to the eligibility rules of the Computer Discount Program.

During Spring, Winter, and Fall quarters the Computer Store in Williamson Hall on the East Bank campus is open Monday-Saturday for these hours • Monday-Thursday 8:30-6:30 • Friday 8:30-6:00 • Saturday 10-4.

Free E-mail Updates

To get product and price change bulletins for the products sold through the Computer Department sent to you electronically, subscribe to the *Bookstore prices* list by sending E-mail to:

request@boombox.micro.umn.edu

Use Gopher for 24-hour Service

Use Gopher to search the Computer Department's database to find out part numbers, prices, and product availability. "Electronic Ordering" options are available at these two Gopher locations:



- University of Minnesota Campus Information
 - Department and College Information
 - Minnesota BookCenter Electronic Desk
- Computer Information
 - Microcomputer Prices
 - Minnesota BookCenter...Electronic Ordering

▼ Recent Apple Changes

Apple recently introduced some new notebook and subnotebook machines in its PowerBook line; most of the machines have 68040 CPUs. Table 1 includes prices and configuration information.

All the new 68040 machines come with a special mobility bundle that includes communications, power management, and information and compatibility management software, such as Macintosh PC Exchange and MacLink Plus/Easy Open Translators.

PowerBook 520, 520c, and 540c

The PowerBook 500 series offered through educational channels contains three models: the 520, 520c, and 540c. Their microprocessor is a Motorola 68LC040 with an integral MMU (memory management unit). These mouseless Macintoshes are the rumored Blackbirds. None of the machines includes an FPU (math coprocessor); all include an Ethernet interface with an Apple AUI connector.

A distinctive feature of these new machines is the Trackpad, a button-less, touch sensitive, input device that replaces the mouse and trackball.

The 500s have a PCMCIA/030 PDS (processor direct slot); although options for this slot are not readily available. Look for the slot in the second battery bay.

Their electrical range is: line voltage from 100-240 volts and frequency from 50-60Hz.

Battery and Weight

The machines are shipped with one battery. With one battery installed, these PowerBooks weigh 6.3 pounds. If you add another battery, you add another pound. Each 520 and 520c nickel-metal-hydrate PowerBook intelligent battery can provide up to four hours of use before recharge. The batteries recharge in two hours while the computer is shut down or in sleep mode. While the 540c batteries recharge in the same way; each battery can provide up to three hours of use before recharge.

PowerBook Duos: 280, 280c, 230

Like other Duos these include a built in keyboard and trackball with buttons. The three new Duos have a slot for an internal modem and additional RAM. They also include • a power adapter port • a LocalTalk/Serial (RS-422) port • a port for optional modem • a 152-pin PDS connector for a Duo Dock, Duo MiniDock, floppy adapter, or other third devices.

The electrical range of the 280 and 280c is: line voltage from 100-240 volts and frequency from 50-60Hz. The range for the 230 is 85-270 volts and 47-63 Hz.

Battery and Weight

The Duo 230 uses nickel hydride batteries; these batteries provide 2-4.5 hours of use before recharge. The Duo 280 and 280c use nickel-metal-hydride High Capacity Type II batteries; these NMH batteries provide 2-4 hours of use before recharge.

PowerPC Upgrades

When the PowerPC notebooks become available, Apple plans to offer PowerPC upgrades for these new 68040 notebooks and subnotebooks.

▼ **Supra Modem for PCs: \$129**

Our price for the external Supra modem for DOS/Windows dropped to \$129. This 14.4 bps modem is compatible with PC SLIP and comes with a cable to attach the modem to your microcomputer.

Table 1: New Apple PowerBooks and PowerBook Duos

Part No.	Model	Motorola 68LC040*/MHz	Screen Size (Inches)	Screen/ Matrix	RAM (MB) Installed/Max	Hard Disk (MB)	Discount Price
PowerBooks: 6.3 pounds, 1.4MB floppy drive							
M2597LL/A	520	Y, 50/25	9.5	passive	4/36	160	\$ 1955
M1845LL/A	520c	Y, 50/25	9.5	passive, color	4/36	160	2500
M2809LL/A	540c	Y, 66/33	9.5	active, color	4/36	320	4080
M3121LL/A	540c**	Y, 66/33	9.5	active, color	12/36	320	4670
PowerBook Duos, no built-in floppy drive							
M2797LL/A	280	Y, 66/33	9	active	4/40	240	\$ 2275
M2798LL/A	280**	Y, 66/33	9	active	12/40	240	2720
— the Duo 280 is 4.2 lb.							
M2329LL/A	280c	Y, 66/33	8.4	active, color	4/40	320	\$ 3170
M2332LL/A	280c**	Y, 66/33	8.4	active, color	12/40	320	3625
— the Duo 280c is 4.8 lb.							
M3266LL/A	230	N, (63030) 33	9.5	passive	4/24	80	\$ 1345
— w/MiniDock & Floppy Drive, the Duo 230 is 4.2 lb.							
M1865LL/A	Duo Dock II with FPU, FDHD floppy drive, Ethernet				1MB VRAM	na	\$ 820
— this dock supports most Apple monitors, including the 20-inch, 16-bit, 1000s of colors							
*	the internal processor runs at the faster speed; the bus at the slower speed						
**	with internal modem						

▼ Recent Price and Product Changes

Below are examples of recent price, product, and packaging changes for Apple products.

Software

ClarisWorks for PowerMacs v2.1 is now \$90.

Part	Microcomputer Descriptions	Price
M1602LL/A	Color Classic 4/80 — w/keyboard	\$ 610
M2687LL/A xxx	Quadra 660AV 8/230 and other Quadra 660AV price changes	1295 —
Workgroup Servers 6150, 8150, 9150		\$ 3635–8660

Part	Internal Apple CD 300i Plus	Price
B1550LL/A	CD-ROM for Centris/Quadra 610, Quadra 660AV, PowerMac 6100	\$ 235
B1548LL/A	CD-ROM for Centris/Quadra 650, Mac IIvx, PowerMac 7100	235
B1549LL/A	CD-ROM for Quadra 800, 840AV, PowerMac 8100	235

Internal CD-ROM: Apple CD 300i Plus is a tray loading drive rather than a caddy drive. (It comes standard on the PowerMacs 6100, 7100, 8100.) The Bookstore and Engineering Services will carry the internal drives listed in the table above. Several AppleCD 300i internal drive kits are also available for \$235.

Discontinued Part	Description
<i>PowerBook Duo</i>	
M2388LL/A	230 4/160 w/modem and DuoDock
M1933LL/A	250 4/200
M1752LL/A	270c 4/240
M2124LL/A	270c 12/240 w/modem

<i>Macintosh</i>	
M1818LL/A	LC 475, 4/80
M1819LL/A	LC 475, 8/160
M1837LL/B xxx xxx	Quadra 840AV 16/500 w/CD-ROM Workgroup Server 60 various bundles Workgroup Server 80 various configs
M1044Z/A	Apple 16" Color Display
M0404	Apple Portrait Display
M8223LL/A	System v.7 Manuals (5/pack)

Gopher Tip

Review:

Accessing Gopher Servers Directly



You can access a Gopher server by entering its host name and port number. Your exact steps depend on which flavor of Gopher client software you are using. Gopher host/server names look somewhat like your E-mail name because both names conform to Internet's naming scheme. Some sample Gopher host/server names are:

Educational Domain, University of Minnesota
gopher.csom.umn.edu

Governmental Domain
atm.geo.nsf.gov

Commercial Domain
gopher.umi.com

Macintosh

On a Mac using TurboGopher select *Another Gopher* from the *File* menu. Then fill in:

- Server name
- Server port (most Gopher servers are on port 70)

That is all you have to fill in before you click on the OK button.

IBMs Using Minuet/Gopher

On an IBM-compatible when you're using Minuet/Gopher you will find the option

New Gopher

displayed along the lower right-hand side of your screen. To type in the name of the Server, hold down the **[Shift]** key before selecting *New Gopher*. You will be presented with a text box. Type the Gopher host/server name in that box. You don't need to specify a port number.

Gopher menu on Maroon and Gold

The University's "Mail" shell has a Gopher option that you select to access information that is available on Gopher servers. Begin by selecting this option. To type in a Gopher host/server name use the open **[O]** command.

Gopher is Still Growing



In our May issue we listed the nearly 100 Gopher Servers that were added in a three week period. Table 1 is just a sampling of new or changed Gopher servers that were added since we went to press for the May issue. To keep up-to-date on Gopher's growth, subscribe to the *gopher announce* mailing list. To subscribe, E-mail a *subscribe* request to: gopher-announce-request@boombox.micro.umn.edu

Table 1: A Sampling of New Gopher Servers

Gopher Server Name	Host Name <i>port=70 unless otherwise noted</i>	Type
Agency for International Development (USAID)	gopher.info.usaid.gov	1+
Air Force Avionics Directorate Gopher	gopher.aa.wpafb.af.mil	1
Allergy-Immunology, Medical College of Georgia	lab.allergy.mcg.edu	1+
American Meteorological Society Gopher	atm.geo.nsf.gov	-
Association for Women Geoscientists	flint.mines.colorado.edu port = 4501	-
Barbershop Quartet Gopher Server	timc.pop.upenn.edu	1
Carlson School of Management	gopher.csom.umn.edu	1+
CHANCE database	cameron.geom.umn.edu	1+
Digital Information Infrastructure Guide (DIIG)	famsworth.mit.edu	-
EPA - U.S. Environmental Protection Agency — Core Server	gopher.epa.gov	1+
Federal Deposit Insurance Corp	fdic.sura.net port=71	1+
GlasNet	glas.apc.org	1+
GLIN, The Great Lakes Information Network	gopher.great-lakes.net port=2200	1
Illuminati Online / Steve Jackson Games	io.com	-
Interactive Mathematics Text Project	imtp.math.upenn.edu	1
International Atomic Energy Agency (IAEA) Gopher	nesirs01.iaea.or.at	1+
KREN (KoRea Educational Network) Info Center	ns.kren.nm.kr	1+
Medical Imaging Networked Consortium (MINC)	mirage.umdj.edu	1
MedSearch America	gopher.medsearch.com port=9001	1
NASA/Goddard Laboratory for Terrestrial Physics	ltpgopher.gsfc.nasa.gov	1+
NASA Shuttle Small Payloads Info	sspp.gsfc.nasa.gov	1
National Renewable Energy Laboratory	gopher.nrel.gov	1
NETVET Veterinary Resources	netvet.wustl.edu	1
NorthNet Gopher	aldus.northnet.org	1+
Public Broadcasting Service (PBS) gopher	gopher.pbs.org	1+
Society for Neuroscience Central Office	gopher.sfn.org	1+
State of Wisconsin Information Server	badger.state.wi.us	1+
Students for the Exploration and Development of Space (SEDS)	SEDS.LPL.Arizona.EDU	1+
Summit of the Americas Gopher Server	summit.fiu.edu	1+
The Aviation Week Group	datapro.mgh.com port=71	1
The Global Cycling Network	cycling.org	1
United States Census Bureau	gopher.census.gov	-
University Microfilms International (UMI)	gopher.umi.com	1+

This table does not list the geographic routing many people usually use to access a Gopher server. Those who need help accessing the host name will find instructions on page 280.

Free Help: Computing and Information Technologies

Phone Help Line Hours

Central Systems

These systems require a user name and password, which you get when you open an account.

Qualified users can apply for grants to cover some computing related costs.

- EPX (Unix), NVE (NOS/VE), UZ (Ultrix), VX and VZ (VMS) 626-5592 M—F 9 am to 4 pm
(System Status Line 626-1819) 1 Nicholson Hall Walk-in Consulting M—F 10 am to 4 pm
- VM1 (IBM/CMS), 99B Coffey Hall Walk-in Consulting 624-6235 M—F 9 am to 4 pm
- MEDLINE (MinnesotaMEDLINE on NVE) 626-8366 M—F 9 am to 4 pm

Distributed Systems: Microcomputers, Workstations, LANs

Software, hardware, peripherals, local area networks 626-4276 M—F 9 am to 4 pm

- East Bank 152 Shepherd Labs above above above
- West Bank 93 Blegen above above 1 pm to 4 pm
- St. Paul 58 Biological Sciences Center above above 1 pm to 4 pm

E-mail and LUMINA

- E-mail: call for help using your University account 626-7676 M—F 9 am to 4 pm
Forgot your password? Staff: call 626-5592. Students: go to Computer Facilities in 14 Folwell, 26 Lind, 305 McNeal, or HHH 50. Troubleshooting: if Maroon or Gold are down, you'll hear a status report at 626-1819.
- LUMINA: call if you have trouble connecting 626-5592 M—F 9 am to 4 pm

Computer Services Information 625-1555 any day any time

General Information

Associate Vice President and

Associate Provost Academic Affairs

Donald R. Riley, Professor 626-9816

University Computing and Information Services

- Administrative Information Svcs. (AIS) Help desk ... 4-0555
- Biomedical Graphics, various locations 6-3939
- Central Computing Services, 100 LaudCF 6-1600
- Accounts: EPX, NVE (incl MEDLINE), UZ, VX, VZ .. 6-8366
- Data Entry 6-8351
- Tape Librarian 6-1838
- Statistics Services 5-2303
- Computer Facilities (also call individual facilities) .. 5-1300
- _FolH 5-4896 _Lind 6-0856 _McN 4-5367 _HHH 4-6526 +more
- Disability and Computing Services, voice 6-0365
- TDD 6-0569
- Distributed Computing Services, 190 Shep Labs 5-1300
- Engineering Services, 103 LaudCF 5-1595
- Equipment Repair and Warranties 5-1595
- Faculty Resource Center (for appointment) 5-1300
- Gopher Server Setup (for a fee) 5-2303
- Kodak Printer Service 6-1661
- St. Paul Computing Services, 50 CofH 4-7788
- Accounts: VM1 (IBM/CMS) 4-7788
- Data Entry 4-7297
- Tape Librarian 4-3482
- Statistics Services 4-6235
- Software Services (contract programming) 5-2303
- Supercomputer Center Help, 3030 SCC 6-0808
- Telecommunications, 30 TelecomB
- Networking Services Information 6-7800
- Networking Services Repair 5-0006
- Training, Course Registration, 190 ShepLab 5-1300
- U Libraries, Integrated Information Center 4-2020
- University Networking Services, 130 Lind 5-8888

Williamson Hall Book Center

Computer Dept 625-3854
(inventory and prices also available on Gopher)

Access Information

SLIP: 2400/9600 626-1920
SLIP: ADI-100 and ITE (with MKO) 3-0291

-  Terminal settings for these systems are 8-1-N (8 data bits, 1 stop bit, no parity) unless otherwise noted. The number you dial may depend on the modem's bps or baud rate.
-  Internet addresses.
 - Dial-in Server: 626-0300, -1200, -2400, -4800, -9600
 - At 9600 Telecomm supports V.32 and MNP level 5 error correction.
 - On campus ADI-100 and ITE setups use 626-2400.

LUMINA: 300/1200/2400 625-6009 
V.32 4-7539 

Telnet & tn3270 _____ PUBINFO.AIS.UMN.EDU 

E-mail and Internet Service and Servers, Twin Cities
_____ GOLD.TC.UMN.EDU MAROON.TC.UMN.EDU 

Gopher, alternate access (log in as gopher)
300, 1200, 2400, 9600 see Dial-in Server 

_____ CONSULTANT.MICRO.UMN.EDU 

Consulting via E-mail: low priority Central System ques
Format _____ CONSULT@MACHINE.NAME.UMN.EDU

AIS SecureID V.32 626-1061 
300/1200/2400 6-7770 

tn3270 & Telnet _____ ADMIN.AIS.UMN.EDU 

EPX, NVE (includes MEDLINE), UZ, VX, VZ
300, 1200, 2400, 9600 see Dial-in Server 

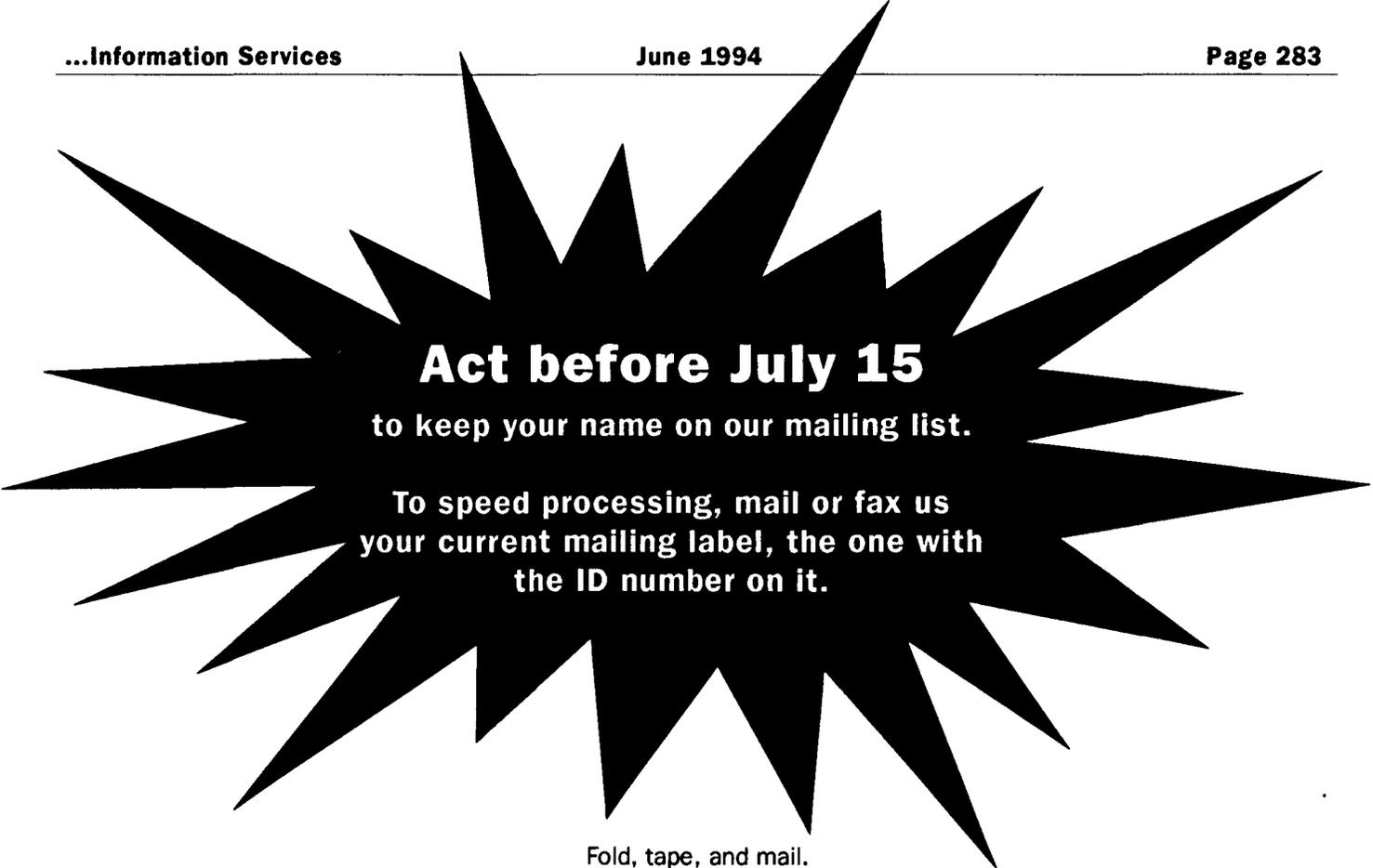
EPX or UZ or VX or VZ or NVE.CIS.UMN.EDU 

EPX, NVE: 300/1200/2400 625-1445 
up to 19.2 campus data phone 3-2400 

VM1 (IBM/CMS) at 7-1-even
9600 624-3668 

1200/2400 & <19.2 campus data phone .. 4-4220 
_____ VM1.SPCS.UMN.EDU 

UMN News Server _____ NEWS.TC.UMN.EDU 



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Computing and Information Services

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Computer and Information Services Newsletter

University of Minnesota
Distributed Computing Services
Room 190, Shepherd Labs
100 Union Street SE
Minneapolis, MN 55455-0421

Nonprofit Organization
U.S. Postage
PAID
Minneapolis, MN
Permit No. 155

Published Monthly By

Distributed Computing Services
Editor, M. Kelleher, mary@boombox.micro.umn.edu

— This publication is available on Gopher (Computer Information, CIS Newsletter). Alternative formats available upon request.