Computer and Information Services Newsletter

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

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abla Features

Books on Disk	29
Central System News	
We'll Back You Up	19
Data Entry Services	19
Copyright	
Concern for Compliance Captivates Campus	22
E-mail Bargains	
Upgrade: POPmail II 2.1	13
Update: Minuet 1.0 beta 16	
Find it Faster,	
Use Minnesota's Veronica	23
Free E-mail Accounts for	
Departments and Organizations	15
LUMINA Closed Labor Day Weekend	
Minuet and POPmail	
Obtaining the Software	
Obtaining Information	17
POPmail and Minuet for Multiple Users	
Training at Reduced Costs	
Self-Paced Products for Departments	30
University Libraries	-0
LUMINA Gets a Face Lift	20

Book Center News

Use Gopher for 24-hour Service	26
Back to School Software Specials	26
IBM PC Company Product/Price Samples	26
IBM ThinkPad 500 and 510Cs	28

And a 4 page flyer from the Computer Store about Apple and IBM Back-to-School Specials.



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E-mail Bargains

POPmail II and Minuet Upgrades

▼ Upgrade: POPmail II 2.1

Now you can edit someone else's subject lines.



We recently released version 2.1 of POPmail II (electronic mail software for the Macintosh). Below are eight examples of how we've refined POPmail.

Help for Bad Subject Lines

- In the *Browser* window, if you hold down the Option key and click on a message index line, you can edit the text displayed in the *Subject* line. Editing the subject line does not alter the content of the original message. This change allows you to take greater advantage of POPmail's sorting capability or to make a pesky subject line more meaningful.
- No more Forwarded Message subject lines (unless you want to them). The new scheme is: original subject (fwd) — for example

Strib Elec Newspaper (fwd)

This scheme is more useful for sorting and still signifies that it is a forwarded message.



Need help obtaining the upgrades? Read our article on page 17.

Improved Sorting

• Some messages that arrive have leading spaces on the name, subject, or date fields. These spaces made sorting less useful. Now all leading space characters are stripped.

Improved Cursor Handling

 If you go to another window after you've begun typing a message, when you return to the message sender/ composer window, your cursor will be right where you left it.

Changes to Windows menu

These options are useful for composing messages off-line.

- The *Close All Senders* option closes all message composing windows that are open.
- The *Post All Open Senders* option posts all the open message composing windows.
- Even if there are no open message sending windows, *Post All Open Senders* will look to see if there are any posted but (for some reason) unsent messages. Following its search, it will: (1) say 'All mail has already been sent' or (2) attempt to post the mail.

Help for Bad Spellars ; -)

• Now POPmail will work with stand-alone spell checkers besides the discontinued HyperSpeller.

Bug Reports and Questions

You can E-mail any bug reports, questions, or comments about the POPmail software to

popmail@boombox.micro.umn.edu

▼ Update: Minuet 1.0 beta 16

Software for IBM/MS-DOS and Windows Users

We recently released an update to Minuet. Those who upgrade do not need to worry about recreating group names or what happens to the mail they are saving; this information is not overwritten or otherwise disturbed.

What's new:

• You can interrupt most functions using the [Ctrl] [Shift]

or Ctrl-Break key combinations.

- Composer To: fields can hold up to 64k of text.
- Printing works better.
- Minuet responds to Indent requests; this results in faster connections to some servers.
- About 90k more memory available.
- Disk is written to less often.
- Network throughput is faster.

Minuet — News, FTP and Telnet

- Fetches news for 2 minutes instead of 30 seconds.
- News fetches are much faster.
- FTP works with long file names.
- FTP dialog boxes make more sense.
- Telnet doesn't hang after connection closes.
- Other computer can control printer in Telnet.

Minuet — Aliases and More

- You can insert aliases into any field with this command:

 [A|t] [A]
- Fixed several Alias related crashes.
- Ping works better.
- Name lookups work better.
- Fixed many other small bugs.

Bug Reports and Questions

Please let us know of any problems you encounter. You can send bug reports and questions to

minuet@boombox.micro.umn.edu



What is Minuet?

Minuet (Minnesota INternet User's Essential Tool) is a toolbox of the most commonly used network software. It replaces or supplements other stand-alone software, such as PC Gopher. We reviewed Minuet in our November 1993 newsletter and featured Minuet's news reader in our December 1993 issue. Minuet includes these modules • POPmail (electronic mail) • Gopher+ client software • Telnet with VT100 support • FTP (very useful for anonymous FTP) • News Reader (for USENET news) • Custom script to connect to LUMINA • U of M and a Global Address Book • Finger, IP Finder, and Ping.

Free E-mail Accounts for Departments and Organizations



University organizations may obtain free E-mail accounts on the maroon and gold computer systems.

Organizations at any level may request that an E-mail account

be created for official organization business. Organizations such as departments, divisions, laboratories, student organizations, offices, committees, research projects, etc. are eligible for accounts. Student organizations must be registered with the Student Activities Office, 220 Coffman Memorial Union.

Your organization's E-mail address will be added to the new and improved version of the online phone book (the electronic directory); an abbreviated sample is shown in Figure 1.

Obtaining the Account

Requests for organizational accounts should come from each organization's administrative leader or official representative (e.g. a director, supervisor, administrator, or officer).

Send your request for an account by E-mail to:

accounts@tc.umn.edu

Send your written request by fax to: 626-8353

Send your written request by campus mail to:
Accounts Administration
Central Computing Services
150 LAUDCF

Your request should include the following information:

- Full name of organization.
- Organization's department and college.
- U of M person who will be responsible for the account (include name, E-mail address, phone, campus mail address).
- Your suggested username for the new account (3-8 characters).
- The Initial password you would like for the account (passwords should be 6-8 characters and include letters and numbers).

You will be notified when the account is created, generally within two weeks after we receive your request.

If you have questions, please send E-mail to: accounts@tc.umn.edu or call 626-8366.



Twin Cities Campus/Departmental Listings Internet Gopher Information Client v2.0.16 Departmental Listings 4. Addressing And Mailing Adolescent Health Program Adv High School Student Services 51. Grad School Doc Student Questions 52. Grad School Masters And Spec Progs 53. Grad School Off Of Equal Opportunity 95. U Of M Reuse Program 96. U Of Minnesota Press 97. University Of Minnesota Ircers

POPmail & Minuet for Multiple Users



Those who are responsible for organizational E-

mail accounts frequently already use an E-mail program, such as POPmail or Minuet/POPmail. These people want to set up their software with the organization's E-mail ID, password, signature file, etc. without keeping multiple copies of the software on their hard disks. This is easy to do, as shown in the POPmail and Minuet sections below.

▼ Multiple Users: Minuet for IBM PCs

The *Minuet for Multiple Users* article in our June 1994 newsletter gives step-by-step instructions for setting up Minuet for those using DOS who have an Ethernet connection. Step-by-step instructions for Minuet users are available for all the scenarios listed below.

Multiple User	Operat	ing System	Connect	tion
Scenario	DOS	Windows	Ethernet	SLIP
1.	Χ		X	
2.	Χ			Χ
3.		Χ	X	
4.		X		Х

You can pick up the instructions in any of our Microcomputer HelpLines or on our Gopher Server. Here's the Gopher path

Computer Information
E-mail
Minuet for Multiple Users

▼ Multiple Users: POPmail for Macs

For our example we'll use Snark Hunt as the organization's name and assume the account's administrator, Carroll, already has an active E-mail account. (Note: the procedure for creating multiple POPmail settings files is part of the documentation that comes with POPmail.)

You need to follow steps 1-5 the first time you set up POPmail for the Snark Hunt account.

- 1. Rename the existing *POPmail Settings* file so it has a unique name; we'll use *POPmail Settings Carroll*, as shown in Figure 1. (You'll find this file in the *Preferences* folder within the *System* folder.)
- 2. Create a folder for the organizational E-mail account; we'll use the name Snark Hunt E-mail.
- 3. Make a duplicate of the POPmail program and drag it into the Snark Hunt E-mail folder. (Once you've set up the settings file you can trash this duplicate.)
- 4. Start up the copy of POPmail in the Snark Hunt folder and select the *Setup* menu. Set it up for the organizational account; examples are below.
 - Select Set Usernames & Server to set and save username, password, and mail server.
 - Set these folders: incoming mail, enclosures, outgoing mail, and archive mail. You might want to give each a unique name, such as Incoming Snark Mail.
 - Create a signature.
 - Set your favorite *Options*, such as: automatically append signature, save a copy when I post a message, and/or "set" POPmail to save text in Microsoft Word's format.
- 5. Quit POPmail. Drag the POPmail Settings file out of the Preferences folder and into the Snark Hunt folder. Give the settings file a unique name; we'll use POPmail Settings Snark, as shown in Figure 2. At this point you can also trash the *copy* of POPmail that's in the Snark Hunt folder.

To start up either E-mail account, click on the appropriately named POPmail Settings file.

Figure 1 (Step 1)



POPmail Settings Carroll

Figure 2 (Step 5)



POPmail Settings Snark Hunt

Why Does This Work?

POPmail keeps the choices you make in the Setup menu in a file called POPmail Settings. This file is automatically saved in the Preferences folder. Whenever you double-click on the POPmail application icon, the program hunts for an existing POPmail Settings file. It looks first in the same folder that the POPmail application is in. If it does not find the settings file there, it looks in the Preferences folder. If it doesn't find one there it creates one.

You can also start up POPmail by double-clicking on a POPmail Settings file. When you do this, the POPmail application uses the data stored in that settings file for that particular session of POPmail.

The Alias Refinement

An easy way to access each POPmail Settings file is to have them show up in your free menu. (Anything you put in System 7's Apple Menu folder shows up in the free menu.)

You can use System 7's Make Alias function to create an alias for the two POPmail settings files, and put those alias files in the Apple Menu folder.

The Groups Feature

POPmail's Groups feature is useful for creating mailing lists or an alias for someone whose E-mail addresses you might otherwise forget. It is easy to share mailing list (Group) names with other E-mail users.

To do this select all the names shown when you select the *Edit Groups* option and copy them. Then paste the names into a *Message Sender* window and E-mail them to another E-mail user, for example Snark Hunt.

Minuet and POPmail

Obtaining Information Obtaining the Software

▼ Minuet

Minuet users may be interested in subscribing to either of the electronic mailing lists discussed below.

minuet-announce

Minuet users can receive announcements about Minuet updates and upgrades by sending E-mail to the address shown below. Once you're on this mailing list, you will receive a modest amount of mail; we moderate the list.

minuet-announce-request@boombox.micro.umn.edu

minuet-news

The minuet-news list is a "free-for-all" type of list that anybody on the Internet can send mail to. Although the Minuet team will monitor this list, we are not responsible for the postings. The list is set up for discussion among Minuet users. To subscribe, send E-mail to:

minuet-news-request@boombox.micro.umn.edu

Obtaining Minuet

There are several ways you can obtain the Minuet software.

The Floppy Disk Way

You may bring floppy disks to any Microcomputer HelpLine and use the IBM Information Server to copy the software from the P: (public) drive. If you plan to use Minuet with a modem, you can use the

slipdisk

procedure (a batch file) to copy Minuet and SLIP to a floppy disk. If you just want the upgrade or plan to use Minuet with Ethernet or EtherJack, you can copy minuarc.exe from this directory:

p:\internet\minuet

Other Methods

If you're on a Novell network on campus, look for the server name

micro_info

If you see this server, you can log on as username *guest* and access all of the available software on the P: drive.

We also provide anonymous FTP access, which is useful for people who want to upgrade from previous versions of Minuet. The source site, source path, and source name (software) for our boombox site are listed below:

boombox.micro.umn.edu
/pub/pc/minuet/beta16
minuarc.exe

To download the file your ftp client software must be in binary (i.e., not text) mode.

minuarc.exe

Minuarc.exe is a self-extracting PKZIP file. To extract the software type

minuarc

Hardware Requirements

Minuet can be used on nearly all IBM-compatible machines, including ancient PCs with monochrome display adapters. It needs 512K RAM, and it requires DOS 3.0 or above. You may use Minuet from either the DOS or DOS plus Windows operating system. (Although Minuet is not a Windows application, it works with a mouse and has a similar look and feel.)

▼ POPmail

We have a moderated mailing list that notifies people about POPmail updates and upgrades. To add your name to this electronic list, send E-mail to

popmail-news-request@boombox.micro.umn.edu

Documentation

We distribute the POPmail documentation with the software. You can use TeachText to read it on disk or to print a copy.

Obtaining POPmail

The software is available several ways.

Mac Information Server

The software is on the information volume of the Mac Information Server. You can access the server from many locations, including the computer on your desk if you can see the *MicroCenter* AppleTalk Zone. All of the Microcomputer HelpLines and most of the Computer Facilities have access to this information server.

The information volume's Communications folder has a Network Software folder. This folder has a lot of network software, including POPmail, Fetch, Nuntius, and MacTCP. (Since you must have MacTCP installed on your machine before you can run any TCP/IP network software, such as POPmail, many people already have MacTCP installed on their machines.)

Anonymous FTP

It is also available via anonymous FTP from the server and directory named below

boombox.micro.umn.edu
/pub/POPmail/macintosh

For SLIP Users

We suggest MacSLIP users who are using POPmail that is several versions older than 2.1 stop in any Microcomputer HelpLine and pick up new SLIP software disk(s). When we changed our SLIP packaging to include MacSLIP version 2.04 (and Telnet 2.6), we also included new SLIP modem scripts that make it easier to use SLIP over a modem.

If you already have MacSLIP 2.04, you may want to copy POPmail yourself from the Mac Information Server; you do not need to talk to a consultant.

Hardware Requirements

To use POPmail you need at least System 6.0.7 and 1MB of RAM. If you are running System 7.x, then you need a minimum of 2MB of RAM.

▼ Subscribing Tips

The request mailing lists discussed here are not handled by LISTSERV software. The only commands these "request" setups understand are

subscribe unsubscribe

To get on these electronic mailing lists, send E-mail to the appropriate name and use the word "subscribe" somewhere in the message of the file. You do not need to include your E-mail address in the subscribe or unsubscribe message because the "request" program will get it from the header. The header is sent along with each E-mail message but is usually invisible to you.

Central Systems News

▼ We'll Back You Up

Automatic Backup Services for Networked Macs, PCs, and Workstations



Have you ever lost critical information on your computer because of a damaged disk drive, or because you accidentally deleted a file? If so, you know the importance of backing up your hard disk regularly.

Diana Oswald, who works in the Financial Policy Development office, accidentally deleted an important database the first week of July. But since her office had recently "subscribed" to Central Computing Services automatic backup service, she didn't panic. She just phoned the file restoration line, and CCS staff transferred her entire database back to her within minutes.

"I was very impressed with the way you were so readily available on a Friday afternoon before a long holiday weekend. I was also impressed with the way you ftp-d the file back on my hard drive with such speed and so little fuss. In just ten minutes it was there, ready for me to work on. Not only did I not lose the file, but I didn't lose any time, either," Diana wrote. "Thanks again for your excellent service."

Simple and Low Cost

The backup and restore service Diana refers to uses LocalTalk or Ethernet connections to automatically back up the contents of your computer's hard disk. The easy, safe backup procedure can be performed daily or weekly, as you prefer. Any files on your system at the time of the backup will be retained for 6 months. All this, for one small monthly fee (about the cost of a cup of coffee per day).

If you lose your data due to damaged equipment, theft, or other problems,

your data can be easily restored within a matter of minutes or hours, depending on the size of the files.

Details & Application Form on Gopher

More details on this backup service are available through Gopher. The new path from the Home Gopher Server is

Computer Information\Central Systems Computing\Backup Services for Networked Macs, PCs & Workstations

Within the backup services section you'll find basic information on the service, a compilation of frequently asked questions, and an application form that you can print out, complete, and fax or mail to us.

Getting Started

Once we've gotten your completed form, we install the necessary client software on your equipment at your location at a time that's convenient for you (installation takes only a few minutes per machine). We'll also discuss the best time(s) to schedule your backup, and provide you with basic instructions and a handy reminder/reference card.

Investing in a secure backup service is basically "data insurance." We all hope we'll never need to use it but cannot risk being without it.

If you have further questions, or need to discuss your particular backup needs, contact Pete Bartz by phone at 626-1661 or by E-mail at

pab@maroon.tc.umn.edu

▼ Data Entry Services

St. Paul Services

August 1 Closing

As of August 1, 1994, data entry services will no longer be offered by St. Paul Computing Services. The change is due to a decrease in demand for this service. Our Data Entry staff thanks their many users for their support over the years.

There remains a Computer and Information Services Data Entry service offered from Lauderdale (call 626-8351).

The Office of Measurement Services in Counseling and Consulting Services at the University offers scanning of standard score sheets. Various outside vendors also offer data entry services.

LUMINA Closed Labor Day Weekend

LUMINA will be unavailable for 48 hours during the Labor day weekend

beginning 6 pm on Saturday, September 3 and ending 6 pm on Monday, September 5

Why? AIS (Administrative Information Systems) is upgrading their computer system, and all of their computer resources, such as LU-MINA, CUFS, PROFS, and Student Systems, will be unavailable during that time.

LUMINA Gets a Face Lift

Nancy K. Herther, Manager, Integrated Information Center



The University Libraries have been busy making changes and adding to the LUMINA database system in order to better serve the needs of our users. We hope you've noticed and we hope you are as pleased with the results as we are!

Committee on Institutional Cooperation: CIC
On June 12, 1994, the University Libraries began a process of upgrading the LUMINA system, in the first stage of a cooperative project among the CIC (also known as the "Big Ten") Universities. All CIC Universities want to work to make using their library catalogs and other electronic databases more effective and easier to navigate. Over the next year, the library catalogs from all these institutions will become searchable through LUMINA using the same search commands that you are already familiar with using with our University of Minnesota/Twin Cities library catalog.

What's in a Name

First, we realized that LUMINA was starting to mean alot more than just the name of the catalog for the holdings of the Libraries. Is LUMINA just that portion of the catalog for what we own here on campus? Is it also that portion of the system that lets you search bibliographic databases? Does LUMINA include the features for searching other local or national library catalogs? We realized that it was time to make sure we were making it clear when the Libraries ourselves "owned" some materials or when we were providing gateway services to databases or collections owned by others.

We like the name LUMINA and realize that you do too. Because everyone knows our system as LUMINA, this continues to remain the umbrella name for the electronic resources and access that we provide. However, to make it clear what some of the subsets of LUMINA are, we are now calling our own catalog of the collections of the University Libraries:

MNCAT

This used to be called LUMINA/Catalog on our screens and was confusing to many users. The subset of recent purchases — what used to be called LUMINEW — is now called MNNEW, shown in Figure 1 along with MNCAT.

A Work in Progress

The new LUMINA Navigator menu and screen designs are just a part of the Libraries' efforts to keep the database system current and state-of-the-art. The new menu allows us to use the new Z39.50 standard for not only the presentation of our database, but also that of other Universities — such as the "Big 10" schools, so that you can use these databases without having to learn a new search software system for each different database.

Selecting Databases for Searching in the Future

Instead of using numbers when selecting specific bibliographic databases to research, you will be able to use mnemonic labels. This is not only more precise — and hopefully easier to remember — but will allow you to move to different databases without going through the main LUMINA menu.

Check Us Out!

Other changes will be made to the main LUMINA menu as part of this project. Please take a minute to go into LUMINA and take a test drive! If you have any problems or questions, please ask at any Reference or Information desk in the Libraries for assistance.

If you have questions, suggestions or see possible errors in the LUMINA database, please feel free to tell the staff at any reference or information desk in the Libraries, or write us at X-OOPS@vml.spcs.umn.edu. If you provide your name and phone number, we'll even call you back about your problem or question. We are constantly trying to find new and better ways to provide our University community with better information. Your ideas and comments are an important part of this process!

Communications to the author may be addressed to: Nancy K. Herther, Manager, IIC, 6 Walter Library, East Bank, 624-2020, nherther@iic.lib.umn.edu.

Editor's note — Tip for TurboGopher users
If you access LUMINA from the LUMINA terminal session (using Telnet) section of Gopher, use terminal ID 56, a VT100 option. For most computer setups, option 56 will display (echo) what you type on your keyboard onto your computer screen.

Figure 1: Options for Navigating the Databases

Now once you choose option 1 for LUMINA on the Public Services screen, you will see this set of options for navigating the databases available through the LUMINA system. If, for example, you would like to see one of the bibliographic databases you would type INDEXES and <Enter>.

```
LUMINA - University of Minnesota Libraries
To choose a database enter the label shown at left.
To return to the Public Access menu enter xq .
  MNCAT
                 U of MN Catalog
                 Recently-Added Titles
  MNNEW
  INFO
                  U of MN Libraries Information
  GOPHER
                U of MN Gopher
                Online Databases (Indexes and Abstracts)
  INDEXES
                Other Library Catalogs in Minnesota
  OTHER
  BIGTEN
                 "Big Ten" University Library Catalogs
  MED
                  MinnesotaMEDLINE
        ---- + Page 1 of 3 -----
                 Select a database label from above
                                                    <F8> FORward
HELp
                 NEWs (Library System News)
Database Selection:
```

Figure 2: Sample Record

Sample record in LUMINA shows one of our many CD-ROM databases available throughout the University Libraries. The entry gives you the Wilson location of this disc, the latest issue that we have and retention policy information.

```
Search Request: T=COMPUTER SELECT
                                                MNCAT-U of Minnesota
SERIAL - Record 1 of 3 Entries Found
                                                Holdings Detail
Title:
              Computer select
WILSON Business Reference (Non-Circulating)
LOCATION:
CALL NUMBER:
              QA75.5 .C678x
STATUS:
              Check Shelf
LIBRARY HAS:
              1994:June
              Library provides access to latest edition only
              ASK AT BUSINESS REFERENCE DESK
                 Page 1 of 1 - - - - - - -
STArt over
                 VIEw record
                                                   <F6> NEXt record
HELp
                 LONg view
OTHer options
                 INDex
NEXT COMMAND:
```

Copyright: Concern for Compliance Captivates Campus

Erika Brant, Copyright Administrator, Copyright Permissions Center

The copyright laws and their attendant issues have gained in importance at this and other universities in recent years.

Many of our staff, faculty, and students are aware that permission must be obtained before republishing or reproducing multiple copies of

printed materials. This type of activity often occurs in the preparation of course packets for classroom use at the University.

In June of this year, a group of publishers successfully sued a Michigan photocopy chain for copyright infringement relating to college course packets. For the second time in three years, a federal district court declared that such materials cannot be produced without the permission of the publishers or other rightsholders involved. "The Michigan ruling constitutes a resounding reaffirmation of the importance of copyright protection," said Nicholas A. Veliotes, president of the Association of American Publishers in New York. "The federal courts again have made clear that unauthorized photocopying for course packs is illegal."

About the Copyright Permissions Center

The University of Minnesota Copyright Permissions Center, in conjunction with Copies on Campus, provides assistance to faculty and staff in obtaining the permissions necessary to reproduce copyrighted material. Now entering our third year of operation, the Copyright Permissions Center has three full-time individuals on staff with extensive knowledge of the copyright laws and

The Copyright Permissions Center and Computer and Information Services have implemented a system that allows faculty and staff to submit permission requests using electronic mail.

experience with the permissions process. Since 1992 we have been registered with the Academic Permissions Service, the academic branch of the Copyright Clearance Center, and are currently their third largest academic account.

In 1993 we signed a remote site license agreement with Harvard University Publishing Corp., which enables us to offer immediate access to unrestricted Harvard Business School Case Studies and Harvard Business Reviews. We also have a database of over 1500 publishers and other rightsholders to whom we apply directly for permission.

We have a database of over 1500 publishers and other rightsholders to whom we apply directly for permission.

How to Obtain Copyright Permission

Faculty and staff may request the assistance of the Copyright Permissions Center by filling out a copyright permission request form for each source for which permission is needed. The request forms may be obtained from the Copyright Permissions Center or any Copies on Campus location.

For Best Results

For best results, please allow six to eight weeks for your permissions to be obtained. During the permissions process, you will be notified if a publisher is assessing an unusually high royalty, if a request is denied, or when your permissions are near completion.

After Permissions Have Been Secured

After permissions have been secured, your course materials will be available for purchase at the most convenient Copies on Campus location. All fees assessed will be calculated into the cost of the course packet unless otherwise requested.

Submitting Requests via E-Mail

To simplify the permissions process, the Copyright Permissions Center and Computer and Information Services have implemented a system that allows faculty and staff to submit permission requests using electronic mail. This service gains several advantages for the University by

reducing paperflow, increasing the available options for faculty and staff who need the form, and decreasing the amount of time required for the Copyright Permissions Center to process the form.

Use Internet Gopher

Faculty and staff who would like to take advantage of this system will need access to Internet Gopher and electronic mail. Use Internet Gopher to obtain a copy of the permission request form, which you can then fill out and submit using electronic mail.

Once you start the Internet Gopher, select these "menu" items to access the permission form:

University of Minnesota Campus Information \Department and College Information \Copyright Permissions Center

In the Copyright Permissions Center section you'll find both the form and instructions for submitting the form using electronic mail.



Questions or Concerns

If you have additional questions about the permissions process, or would like to receive a detailed instruction sheet on how to submit your requests using IBM or Macintosh software, call us.

You may contact the Copyright Permissions Center at 626-8658 or 626-9416 between 8:00 and 4:30, Monday through Friday.

Find it Faster Use Minnesota's Veronica

Gopherspace explorers who need help locating information on a specific topic frequently turn to veronica. Veronica is software that helps you harvest information from Gopher servers around the world. Various Internet sites, such as the University of Manitoba and PSI Net, run veronica and store the resulting millions of entries (indexes) for others to use.

From Steven Foster, Veronica Project Manager

The How to Compose Veronica Queries document was revised; the latest document is dated June 23, 1994. We've posted the revised version on the University's Gopher; excerpts are printed below. You can read the entire 278 line document in this section of the University's Gopherspace

Other Gopher and Information Servers Search titles in Gopherspace using veronica

That document contains information about finding resources based on types, for example GIF images (g) or PC binary (5). The document is also available on the veronica menu at veronica.scs.unr.edu 70.

Use Minnesota's Veronica Server

"A veronica is now available at the University of Minnesota, funded by the MINITEX Library Information Network...this server gives preferential service to folks with Internet addresses within the state of Minnesota." (Our June 1994 issue has more information about this and other offerings brought to you by the University Libraries.) We've found the MINITEX Veronica so useful, we've created a bookmark for it. To access the MINITEX Veronica follow this Gopher path

Libraries

MINITEX Veronica service

Search for Babel, Search for Edgar

We recently used this service to follow up on leads about:

- a) a glossary of computer terms called Babel
- b) accessing Securities and Exchange Commission (SEC) information available through an on-line system called Edgar

To find the information we entered the two word queries shown below.

babel glossary
sec edgar

Figures 1 and 2 include very abbreviated samples of the information we found. We think many people will find the glossary useful; the samples we picked for Figure 1 might help you identify those "orphan" files people frequently find on their hard disks.



Excerpts from the "How to"

Veronica is an index and retrieval system which can locate items on most of the gopher servers in the Internet. The veronica index contains about 10 million items from approximately 5500 gopher servers (June 1994).

Veronica finds resources by searching for WORDS in TITLES. It does not do a full-text search of the contents of the resources; it finds resources whose titles contain your specified search word(s). The "title" is the title of the resource as it appears on the menu of its HOME gopher server.

When the search is finished, the results will be presented as a normal gopher menu. You may browse the discovered resources in this menu, as you would use any other gopher menu.

Most veronica-access menus offer several types of searches. In addition to these pre-defined types, you can compose veronica queries using a number of special options to focus your search more precisely.

Multiple Servers

Many veronica-access menus offer a list of various veronica server sites; in this case you will have to choose a server site to use. Ideally, it does not matter which server you use, as all servers will give the same answers. In practice, the servers do not all update the index at the same time, so there will be some difference in the results. Some servers will return an answer faster than others, depending on load and network traffic.

Pre-Defined Search Types

Most access menus offer two predefined search types:

> Search GopherSpace by keywords in Titles

This search will find ALL TYPES of resources whose titles contain your specified search words. The resources may be of any Gopher data TYPE; e.g. ascii documents, gopher directories, image files, binary files, etc.

> Search Gopher DIRECTORIES ONLY for keywords in Titles.

This search will find only Gopher DIRECTORIES whose titles contain the specified words. This search can be very useful to find only major holdings of information which relate to your query. After veronica finds the gopher directories, you can open any of them to see the contents in more detail. This is especially useful to avoid being overwhelmed by too many results if you are searching with a common word such as "women" or "internet"!

Entering a Query

When you select a query type, your gopher client will present a dialog box. Enter your query words. The search is NOT case-sensitive.

You may get better results by entering a multi-word query rather than a single word. Multiple word queries will find only those items whose titles contain ALL of the specified words. For instance, "women" will find 5223 items; but "league women voters" will find 126 items. Be as specific as you can.

A multiple-word query does not require that the words be adjacent in the title, nor that they appear in any particular order. So, "marx brothers" will locate the same items as "brothers marx."

You may find a message at the end of your veronica results menu, like "*** There are 576 more items matching your query". If you are not satisfied with the 200 items you got, you can resubmit the query, requesting more items with "-m."

Query Logic, Boolean Searching

The search understands the logical operators AND, NOT, OR, (, and).

If you use a simple multiple-word query, it is the same as using AND between the words. For instance "acid rain" is the same query as "rain and acid".

We recommend that the word "OR" be used VERY RARELY. Usually, OR will just produce thousands of hit-or-miss results. OR is best used in conjunction with other operators, as "rice and (fried or curr*)."

Figure 1: Sample of File Name Extensions from Babel Glossary

Copyright (c) 1989-1994 Irving Kind All Rights Reserved Updates to this glossary will be issued three times a year, in January, May and September. .AFM Adobe Font Metrics (file name extension) [Adobe] .PDX Paradox files (file name extension) [Borlund] .APP Application (file name extension) [R:Base] .PFM Printer Font Metrics (file name extension) [Windows] .BAK Backup (file name extension) .PRD Printer Driver (file name extension) [Word] .BAT Batch Processing (file name extension) .PRS Printer (file name extension) [WordPerfect] .BIN Binary (file name extension) .PS PostScript (file name extension) Backup (file name extension) [WordPerfect] .BK! .PX Primary Index (file name extension) [Paradox] .BMP Bitmap Graphics (file name extension) [Windows][OS/2] .TIF Tagged Image File (filename extension) .CDF Comma Delimited Format (file name extension) Telex (file name extension) .TLX .CDX Compound Index (file name extension) [Fox Pro] .TTF TrueType Font (file name extension) .CGM Computer Graphics Metafile (file name extension) + .VAL Validity Checks (file name extension) [Paradox] Graph (file name extension) [Lotus 1-2-3] [LDC] Visual Basic (file name extension) .VBX .CMD Command (file name extension) .COM Command (file name extension) + Waveform Audio (file name extension) .WAV .WKB Workbook (file name extension) [WordPerfect] .PDF Printer Description (file name extension) [Borlund,Lotus] .WKE Worksheet (file name extension) [Lotus 1-2-3] [LDC]

Figure 2: Information about EDGAR; Sample From "general.txt" File

Description: General Information about EDGAR Data

Discussion List: edgar-interest@town.hall.org

To Subscribe to List: Majordomo@town.hall.org

E-mail server: mail@town.hall.org

Anonymous FTP: ftp://town.hall.org/edgar/general.txt

Document Revision Date: July 29, 1994

Introduction

Welcome to the Internet EDGAR Dissemination project. This file contains introductory information and will be periodically revised. The Internet EDGAR Dissemination project will allow you to receive any 1994 filings to the Securities and Exchange Commission that are available to the public. Non-electronic filings, filings that are not available to the public, and any data prior to 1994 will NOT be available here.

The data in this project consists of electronic filings by corporations to the Securities and Exchange Commission. Not all corporations currently file electronically, but those that do participate in the EDGAR Filing System.

The EDGAR Dissemination Service is how the on-line public filings are disseminated to the public. The EDGAR Dissemination Service uses two tiers of distribution. The data "wholesaler" is Mead Data Central who operates the EDGAR Dissemination Service on behalf of the Federal government and the American people. Mead Data Central sells data to information retailers, such as its own Nexis(tm) service.

The Internet EDGAR Dissemination project is a research project to investigate how such large data archives can be made easily available to the general public. This demonstration project uses the Internet as a testbed for research into ways that EDGAR can easily be used by the general public.

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request@boombox.micro.umn.edu

Use Gopher for 24-hour Service

Use Gopher to search the Computer Store'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
prices
BookCenter Electronics Desk



Late breaking News: Apple PowerBook 520 Back-to-School Bundle

You can order the 520 bundle, but you probably won't be able to pick it up during the back-to-school promotion.

▼ Back to School Software Specials

The software specials listed in Table 1 are part of our back to school specials; the special prices are available through October 15.

Table 1: Back to School Software Specials

Product/Vendor	Special Price through Oct. 1	.5
Claris		
 MacWrite Pro for W 	/lac \$	55
 Works for PowerMa 	ac	. 59
 Works for Windows 	S	. 49
Mathematica (student ed	dition)	
 Mathematica for M 	facintosh \$	99
 Mathematica for D 	os	. 99
 Mathematica for W 	/indows	99
Microsoft Office (include:	s Word, Excel, and PowerPoint)	
 Office for Windows 	s v4.2 \$:	125
 Office Professional 	I for Windows v4.3 (with Access)	15 0
 Office for Macintos 	sh v3.0	140
	ntain the Random House Dictionary	
 WordPerfect for DC 	DS + dictionary \$	99
 WordPerfect for Wi 	indows + dictionary + Quattro Pro	. 99
 WordPerfect for Ma 	ac + dictionary Spanish, French,	
German + Links Go	olf, clip art	. 99

▼ IBM PC Co. Product/Price Samples

Table 2 has sample prices for some of the IBM personal computer products you can order through the Book Center. None of the desktop machines are bundled with a monitor; you must purchase one separately. To keep the table a reasonable size, we've listed some additional information about these IBM PC Company products in separate sections.

Product Descriptions on Gopher

Full product descriptions are available on Internet Gopher. To view them follow this path:

Computer Information
IBM ACIS Higher Education Info Server
IBM PC Company Information
IBM PC Company Announcements

Look for a May 1994 Performance Series announcement, a February 1994 Pentium P60 announcement, and an October 1993 Valuepoint 6381 model announcement. You can also use keywords to search the announcements section for information on specific products.

Software

The machines that come with DOS have IBM's DOS 6.1. To run Microsoft Windows 3.1 in 386 Enhanced Mode we recommend that you have at least 4MB of RAM installed on your computer.

IBM's Operating System/2 (OS/2) can run DOS and Windows software (you do not need to purchase separate copies of either to run Windows and DOS software). To run OS/2 you need a minimum of 4MB of RAM and 15-60MB of free disk storage space. (Some application scenarios require significantly more than 4MB of RAM.)

ValuePoint Si SpaceSaver

In addition to the basic configuration, the SpaceSavers also come with

- one year warranty
- local bus SVGA and 512K RAM
- L2 write-back 128K and 256K options available for DX models
- SX25 supports 486DX25 math co-processor upgrade

- •16-bit VESA local bus on F30, 32-bit VESA local bus on M30 and W50
- 100 watt power supply

ValuePoint Desktop

In addition to the basic configuration, the ValuePoint Desktop models come with

- one year one-site warranty
- VESA local bus
- accelerated SVGA, IMB video RAM
- 32-bit VESA local bus
- 200 watt power supply

Performance Series

In addition to the basic configuration, the Performance Series comes with

- three year warranty; first year on site
- 64-bit VESA local bus
- accelerated SVGA, 1MB video RAM (2MB maximum)
- L2 write through cache
- 200 watt power supply

Table 2: Sample of Current IBM Personal Computers

Base Configuration — these computers come with:

- an IBM mouse and an IBM Enhanced keyboard
- one 3.5-inch 1.44MB floppy drive
- I/O (Input/Output) ports for mouse, keyboard, as well as one parallel and 2 serial ports

ValuePoint SI Space Saver: while supplies last 6381-F30					0S/2	Price
6381-F30						
6381-W50 486DX2/66 212 " ValuePoint DeskTop 6384-V73 486DX2, 25/50 340 8/64 6384-X51 486DX2, 33/66 212 " Performance Series	3/3	L1/8K	Υ	Υ	_	\$ 865
ValuePoint DeskTop 6384-V73	•	u	Y	Y	_	1210
6384-V73 486DX2, 25/50 340 8/64 6384-X51 486DX2, 33/66 212 " Performance Series		u	Y	Y	-	1650
6384-X51 486DX2, 33/66 212 " Performance Series						
6384-X51 486DX2, 33/66 212 " Performance Series	5/5	L2/128K	-	-	Υ	\$1740
	u	и	Υ	Υ	•	2025
6482-X4F DX4/100 364 8/128	5/5	L2/256K	Υ	Υ	_	\$2545
6484-X4G DX4/100 " "	"	L2/256K	-		Υ	2650
6482-L4F 486DX2/66 " "	u	L2/128K	Υ	Υ		2290
6482-LPF 486DX2/66 " "	u	L2/128K		-	Υ	2615
6482-LPF Extras: 2X CD ROM, 16-bit sound card, Works fo	or Windows, M		, variou	is CD gam		iore
ValuePoint Pentium P60						
6384-189 Pentium/60 424 16/128	5/5	L2/256K	_	– none –		\$2945
6384-1A3 " 527 8/128	<i>u</i>	-2, 200.1		- none -		2675
6384-1A9 " 527 16/128	u	"		– none –		3105

ValuePoint Pentium P60

In addition to the basic configuration, the ValuePoint Pentium P60's come with

- one year on-site warranty
- PCI local bus
- accelerated SVGA,
 1MB video RAM (2MB maximum)
- two 32-bit PCI local bus slots
- L2 write-through cache
- 200 watt power supply

PCI Local Bus

The PCI (Peripheral Component Interconnect) is a high-performance local bus that was developed by more than 150 companies, including IBM and Apple. Bandwidth devouring peripherals, such as video and graphics components, can run into bottlenecks when data is transferred between the computer and the components. The PCI is designed to eliminate these bottlenecks.

Options

You can also purchase optional parts such as a \$235 4MB memory module for ValuePoints and an external 2X speed Photo-CD-ROM that works with the ISA bus for \$195.

Did you use CP/M?

DESIGNER OF CP/M DIES

Gary Kildall, who created CP/M (Control Program/Monitor), the operating system for personal computers that was extremely popular in the 1970s, died this week at the age of 52. (New York Times 7/13/94 C17)

Courtesy of EDUPAGE

This information appeared in the July 14, 1994 issue of *EDUPAGE*, an electronic publication.

To subscribe to EDUPAGE, send E-mail to listproc@educom.edu and in the body of the message type the subscribe command shown below. Where you see your_name, type in your own name, for example Ray Bann.

sub edupage your_name

▼ IBM ThinkPad 500 and 510Cs

Prices for the IBM ThinkPad 500s recently dropped below \$1000. IBM also recently introduced a color subcompact, the 510Cs. Table 3 lists prices and features for both computers.

Like the 500, to keep the machine's weight down, the 510Cs' floppy disk drive is external. Both models come with a single type II PCMCIA slot that you can use for various other expansion options. Neither model has a math co-processor.



Product Descriptions on Gopher

Full product descriptions for the ThinkPad 500 are available on Internet Gopher in the *IBM ACIS Higher Education Server* section mentioned above. You can search on the keyword thinkpad. At press time the descriptions for the 510Cs were not on that Gopher server.

ThinkPad 510Cs: \$2235

The external appearance of the ThinkPad 510Cs is similar to the 510. It is a small black subcompact with IBM's TrackPoint pointing device built into the keyboard.

Color Display

Here are the technical details for the 510Cs' 7.7-inch active matrix screen: color STN LCD, backlit, VGA (640x480), 14:1 contrast ratio, 256 colors (640 x 480), dual VGA (ISO support), 7.7-inch actual diagonal viewable area.

Microprocessor

The ThinkPad 510Cs comes with IBM's Blue Lightning microprocessor; it has a 32-bit data path, 32-bit processor, 32-bit address path, and comes with 16KB internal cache.

ThinkPad 500: \$750-965

To use floppy disks you can plug in the external floppy drive that comes with the 500. Carrying the drive around with you will add 9 ounces to your baggage.

Cable Confusion

The ThinkPad 500 comes with some small (non-standard size) adapter cables. One cable lets you plug in an external monitor. Another cable is for the external floppy drive; that cable puzzles some people because it appears to include an extra plug. The plug is for an extra serial port, and lets you use peripherals such as an external modem. To use any of these plugs or to attach a printer cable, you need to open a sliding door. Behind that door you'll find three ports: a round port for the external monitor cable and two 25-pin ports. Use the smaller 25-pin port for the floppy drive cable and the larger one to attach a printer.

Table 3: ThinkPad 500 Series Models

ThinkPad Model	500 2603-17N *	510Cs 2604-C2U
• MHz Hard Disk: MB	50/25 170	50/25 200
Memory (MB) • standard • max • slots	12	20
Screen • size: inches		
Preloaded software • IBM DOS • Windows 3.1		
I/O Ports • serial and parallel • external diskette • display	Y	Y
NiMH Battery • battery life: hrs		
Type II PCMCIA slot Weight: LBS Size: 10.1 x 7.2 x 1.6 Warranty: 1 year	3.7 Y	4.0 Y

^{*} A Model 500 with an 85MB hard disk is available for \$750, PN 2603-08N; it weighs 3.4 lbs.

Books on Disk



As you roam the Internet you will find that many books are available on-line. You can also order books on disk from Spectrum Press Inc. They provide a reader program and a way for you to use the text as an

ASCII (plain text) file. You can use ASCII files with speech synthesizers and word processors.

We recently received their August 1994 catalog in our E-mail "box." The catalog contains literary and reference works, such as those shown below.

Samples from Spectrum

Austen, Jane: Price and Prejudice (*) \$7.95 Chaucer: The Canterbury Tales (*) \$5.95 Descartes, Rene: Discourse on Method \$5.95 Douglass, Frederick: Narrative of the Life of Frederick Douglass \$5.95

Shakespeare, William
Timon of Athens \$5.95
King Lear \$5.95
Macbeth \$5.95
Anthony and Cleopatra \$5.95
Coriolanus \$5.95
Hamlet \$5.95
Taming of the Shrew \$5.95

Voltaire: Candide \$5.95 Washington, Booker T.: Up from Slavery \$5.95 Wollstoncraft, Mary: A Vindication of the Rights of Woman \$5.95

de Presno, Odd: The Online World

A comprehensive and clearly written manual for navigating the Internet and other online resources. Recommended for both the beginner and advanced online traveller. Updates available from the author. \$14.95

Contact and Price Information

Internet: 73774.2733@compuserve.com Compuserve: 71022,251 or 73774,2733

Spectrum's prices are the same for PC and Mac disks. When you place an order you specify which disks you can use in your computer. A * next to a title indicates that the selection is available on 3.5-inch disk(s) only. If you're interested, contact Spectrum Press and ask for a catalog.

Training at Reduced Cost

Self-Paced Products for Departments

▼ Video Training from Learn PC

Through a partnership with Learn PC, the University is offering a line of video, self-paced software training products to University departments (Contract #U160). Learn PC is a Minnesota-based educational publisher and an authorized developer for Microsoft, Lotus, and Novell training. Each video series contains video tapes, guidebooks and an exercise/practice disk. The training may be completed anywhere a personal computer (loaded with the appropriate software) and a VCR are set up.

Costs and Current Series Titles

If sponsored funds for more than \$500 are used, route POT to ORTTA first.

\$15	per course (a series contains 1-7 courses)
\$3	per guidebook/disk
\$25	per series: guidebook/disk site license
\$25	per course for Lotus courseware (site license)

Microsoft	. Access, DOS, Excel, Word, Windows
WordPerfect	. for DOS and Windows
Other	. Computer Literacy
Lotus	. 1-2-3, Notes

Closed Captioned

This series offers closed captioning to help individuals who are hearing impaired, learning disabled, or new to the English language.

For More Information

For further information you can call these people:

- Jane Thomas, University's Purchasing Department, 624-2095
- Bobbie Olson, Learn PC, 930-4509 (fax 930-0560)

▼ An Example: Windows Training from Learn PC

Course 1 Getting the most from your Windows desktop

- Navigating on the desktop: starting
 Windows and using the mouse;
 opening, moving, and resizing Windows;
 minimizing, restoring and maximizing
 Windows
- Using menus: using control and application menus; selecting menu choices with mouse and keyboard
- Utilizing commands: getting help with the help feature; opening group windows; cascading, tiling, and exiting windows
- Extra for experts: creating a program group; marking help topics with the bookmark feature; adding notes to help topics; search for help information; the help window menu bar; contextsensitive help; using the program manager options menu; creating a startup group; Windows built-in diagnostic utility, Dr. Watson; using the multimedia features of Windows.

Course 2

Mastering the application features of Windows

- Using Windows applications: starting and using Windows applications; switching tasks
- Using non-Windows applications: starting, using and switching non-Windows applications; running a non-Windows application in Windows
- Multitasking and sharing data: sharing data between Windows applications; cutting and pasting data to a non-Windows application; multitasking; exiting applications
- Putting Windows accessories to work: using the clock, calendar, cardfile, calculator, and notepad; using Write and Paintbrush accessories; customizing Widows
- Extra for experts: using the minimizeon-use command; switching between applications with alt-tab; using the Windows records; using calendar options; adding a card to the cardfile and viewing the card list; copying and

pasting a calculator total; changing the space between icons; setting up and using Windows screen savers; customizing your Windows icons; using the object packager; Windows TrueType fonts; using the character map; memory capabilities of Windows

Course 3

File management made easy

- Introducing file manager: using the directory tree and directory windows; working with directory windows; copying and deleting files; formatting a disk
- Utilizing files and directories: creating a directory and moving files; copying files between disks; searching for files; opening program files from the file manager
- Extra for experts: moving a directory; associating files; putting a document in a program group; setting file attributes; using Windows setup; the system editor program; the drag and drop feature of Windows.

1994 Macintosh Special Bundles & Prices

Qualified students, faculty, and staff can place their order with the Minnesota Bookstore's Computer Store located in Williamson Hall in the East Bank Bookstore. Call the Computer Store at 625-3854 for more information and for product availability. Students can apply for the Apple Student Loan by calling 800-APPLE-LN.

Everything you need to power through school.

Several of Apple's newest and most popular computers are being bundled together with monitors, keyboards, and some of the best student productivity and reference software. It's designed and priced exclusively with the student in mind and available only at an Apple® Authorized Campus Reseller, like The University of Minnesota Bookstores Computer Store. In addition, for a limited time, designated Macintosh systems will include the Apple Student Resource Set, a collection of software applications created to help students get a head start on the school year.

The **Apple Student Resource Set** includes: *Student Assist by Rae Technology*. A student productivity management application designed exclusively for Apple Higher Education to help track and organize all facets of school work. *Macintosh Writing Companion*. Learn to write better papers with more impact, through this easy-to-use interactive tutorial. *The Internet Companion*. An interactive electronic resource guide to help students get connected and cruise the "Information Super Highway".

— *Microsoft Bookshelf (available with CD-ROM systems only).* A multimedia library of invaluable reference tools, puts an encyclopedia, dictionary, thesaurus, almanac, book of quotations, world atlas, and chronology of historic events, at your student's finger tips.

Desktop Systems



Macintosh Performa 475°

The powerful, low-cost modular Macintosh.

The Performa 475 gives you the power of a 25 megahertz Motorola 68LC040 processor, along with the flexibility of a slim-line, modular design. It also includes many built-in features—such as video support, sound, and networking—that are expensive options on other computers.

The Performa 475 includes 4 meg. of memory, 160 meg. hard disk, Performa Plus Display, Apple Keyboard II, 2400 bps Fax/Modem and an extensive list of software, including, ClarisWorks 2.1, Quicken 4, At Ease, American Heritage Dictionary, Best of HomeWorks Templates, Best of ClickArt Performa Collection, Spectre Challenger, America OnLine, Super Munchers, and Mario Teaches Typing.

\$1,145

🕶 Upgradeable

Macintosh Performa 636

Apple's high-end integrated multimedia system.

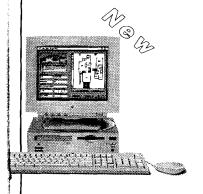
PowerPC Upgradeable

The **Macintosh Performa 636** and CD-ROM-equipped **Performa 636CD** computers are among the most advanced Apple multimedia systems, yet feature an amazingly affordable price. Both incorporate 66/33 megahertz Motorola 68LC040 processors and are extremely expandable offering an array of add-on options—such as direct video in and out for capturing video or saving to video tape, or an optional TV card to run television inside a window while other applications are being used. The Performa 636 systems are perfect for applications ranging from spreadsheet and word processing, to presentations, film editing, or simulations.

The Performa 636 includes 4 meg. of memory, 250 meg. hard disk, Apple Color Plus Display, AppleDesign Keyboard, and an extensive list of software, including, ClarisWorks 2.1, At Ease, American Heritage Dictionary, Best of HomeWorks Templates, Best of ClickArt Collection, Spectre Challenger, eWorld, Spin Doctor Lite game, and The Student Resource Set.

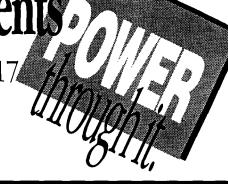
The Performa 636CD includes 8 meg. of memory, 250 meg. hard disk, Internal AppleCD 300i Plus, Apple Color Plus Display, AppleDesign Keyboard, all of the above mentioned software, plus The New Grolier Multimedia Encyclopedia CD, The Time Almanac CD, Microsoft Bookshelf on CD, Software Dispatch CD, and a special Voyager Software CD offer.

\$1,675



A

August 2 through October 174



Desktop Power Systems

Power Macintosh 7100/66

Workstation performance with Macintosh ease-of-use at a PC price.

The Power Macintosh 7100/66 and Power Macintosh 7100/66CD offer the power associated with high-end workstations, but at PC prices. Built around the powerful new 66 megahertz PowerPC 601 microprocessor, these ultra-fast Power Macintosh computers deliver excellent performance for tasks ranging from complex mathematics, to engineering and graphic design. Yet, despite it's speed, none of the Macintosh integration nor ease of setup and use have been sacrificed. The PowerMac 7100 is, quite literally, the computer to take you through college and well beyond.

The Power Macintosh 7100/66 includes 8 meg. of memory, 250 meg. hard disk, built-in ethernet networking, Apple Color Display, AppleDesign Keyboard, ClarisWorks 2.1 software, and The Student Resource Set.

\$2.325

The Power Macintosh 7100/66CD includes 8 meg. of memory, 250 meg. hard disk, Internal AppleCD 300i Plus, Apple MultiScan 15" Display, AppleDesign Keyboard, all of the above mentioned software, plus Microsoft Bookshelf on CD, and a special Voyager Software CD offer.

\$2,569





Apple PowerBook™ 150

Apple's most affordable PowerBook Computer.

The PowerBook 150 combines the performance of a 33 megahertz Motorola 68030 processor in a compact 5.5 pound system.

The PowerBook 150 includes 4 meg. of memory, 120 meg. hard disk, grayscale passive matrix display, ClarisWorks 2.1 software, and The Student Resource Set.

\$1,239

wPC Upgradeable



Apple PowerBook 520

The power and performance of a desktop...anywhere.

The **Apple PowerBook 520** offers exceptional, innovative advances in technology, design, performance, and expandability. Featuring an advanced 50/25 megahertz Motorola 68LC040 processor, the PowerBook 520 lets students experience the true power of desktop computing—anywhere on campus.

The Apple PowerBook 520 includes 4 meg. of memory, 160 meg. hard disk, built-in ethernet networking, 640 x 480 FSTN grayscale Display, ClarisWorks 2.1 software, and The Student Resource Set.

\$1.955

Help 626-4276

Many Apple products are on display in the Microcomputer HelpLine in 152 Shepherds Lab; stop in M-F, 9-4, to look or ask for help. You can also call the Micro HelpLine consultants at 626-4276; they provide support for systems purchased from the University of Minnesota Bookstores.

Back-to-School Offerings

IBM presents Back-to-School bundle values for all of your computing needs; many with pre-loaded software. Special purchase in cooperation with the Minnesota Bookstore's Computer Dept; prices good while supplies last.

Desktop



Entry Value Point 433SX/Si

Intel i486SX/33Mhz processor, 4 MB RAM, 212 MB IDE hard drive, IBM basic 101 keyboard, IBM personal system mouse, Preloaded with PC DOS 6.3 and Windows 3.1.

\$960

Mid-Range Value Point466 DX/Si

Intel i486DX2/66 Mhz processor, 4 MB RAM, 212 MB IDE hard drive, IBM basic 101 keyboard, IBM personal system mouse, Preloaded with PC DOS 6.3 and Windows 3.1.

\$1205

Growth Value Point 466DX2/D

Intel i486DX2/66Mhz processor, 4 MB RAM, 212 MB IDE hard drive, IBM basic 101 keyboard, IBM personal system mouse, Preloaded with PC DOS 6.3 and Windows 3.1

\$1260

Multimedia Value Point 466DX2/D Multimedia

Intel i486DX2/66 MHz processor, 8 MB RAM, 212 MB IDE hard drive, internal ISA multi session CD-ROM drive, IBM basic 101 keyboard, IBM personal system mouse, Preloaded with PC DOS 6.3 Windows 3.1, Kodak Photo CD Sampler, Mayo Clinic Family Health Book, Quicken Deluxe for Windows, and Indiana Jones: The Fate of Atlantis.

\$1930

Power Value Point P60/D

Intel Pentium/60 MHz processor, 8 MB RAM, 540 MB IDE hard drive, IBM enhanced 101 keyboard, IBM personal system mouse.

\$2675

Laptop



Mobile ThinkPad 340 Collegiate Models

486SLC2/50/25 MHz processor, 16KB of internal cache, 4 MB RAM, 125 MB hard drive, 9.5" Monochrome VGA LCD STN, Local Bus Graphics, IBM TrackPoint II Integrated Mouse, Internal 2400bps Data/9600bps Fax Modem, Preloaded with MS DOS 6.21 and Windows 3.1, Microsoft Works, Trition CoSession (IBM Online Housecall), America On-Line and Prodigy, SoftNet FaxWorks 3.0 for Windows, Official Airline Flight Disk.

\$1462

Displays



Color Display Selections

IBM 6324 Color Display 14" SVGA Multiscan 1024x768 Display, 76Hz refresh rate--non-interlaced, energy star compliance-ISO 9241-3

\$405

IBM 6325 Color Display 15" SVGA Multiscan 1024x768, 76Hz refresh rate--non-interlaced, energy star compliance--ISO 9241-3, supports borderless operation.

\$539

8

Entry level printers for IBMs

Everyday low prices



Lexmark ExecJet II 4076

Low-Cost Ink Jet

The Lexmark ExecJet II 4076 uses thermal inkjet technology and has a resolution of 600 x 300 dpi. This printer is simple and easy to use with the Quick Start utility for fast setup. The ExecJet II comes with 12 resident, scalable fonts and 2 bitmapped fonts. Some other great features are: 150-sheet paper tray, 2-3 pages per minuter, free two-year warranty, and EPA Energy Star compliant.

\$275



Hewlett Packard

Low-Cost Laser

The HP LaserJet 4L is a complete printing solution. Anyone can install and use it, and it even turns itself on and off automatically. Complete, powerful, reliable, and easy, the HP LaserJet 4L printer is the most affordable way to get HP LaserJet quality for all your output. You get 300 dpi output at 4 pages per minute and a 100-sheet paper tray.

\$675

How do I order these?

Free Help

Qualified students, faculty, and staff can place their order with the Minnesota Bookstore's Computer Store located in Williamson Hall in the East Bank Bookstore. Call the Computer Store at 625-3854 for more information and for product availability. For IBM loan information students can call 800-442-6562.

Many IBM hardware and software products are on display in the Microcomputer HelpLine in 152 Shepherds Lab; stop in M-F, 9-4, to look or ask for help. You can also call the Microcomputer HelpLine consultants at 626-4276; they provide pre- and post-sales support for systems purchased from the University of Minnesota Bookstores.

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	Priorie	пеір сіі	ie nouis
Central Systems			
These systems require a user name and password, which you get w	hen you open an acc	count.	
Qualified users can apply for grants to cover some computing relate	ed costs.		
☐ EPX (Unix), NVE (NOS/VE), UZ (Ultrix), VX and VZ (VMS)	626-8366	M—F	9 am to 4 pm
□ VM1 (IBM/CMS), 99B Coffey Hall Walk-in Consulting			
☐ MEDLINE (MinnesotaMEDLINE on NVE)			
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
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□ St. Paul 58 Biological Sciences Center	above	above	1 pm to 4 pm
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☐ E-mail: call for help using your University account	626-7676	M—F	9 am to 4 pm
Forgot your password? Staff: call 626-8366. Students: go to	any Computer Facility	y – e.g., 14 l	Folwell, 26 Lind,
305 McNeal, HHH 50. Troubleshooting: if Maroon or Gold are do	wn, you'll hear a stati	is report at 6	26-1819.
☐ LUMINA: call if you have trouble connecting	626-7676	M—F	9 am to 4 pm
Computer Services Information	625-1555	any day .	any time

General Information

Williamson Hall Book Center Computer Dept
University Computing and Information Services Administrative Information Svcs. (AIS) Help desk 4-0555 Biomedical Graphics, various locations
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Telecommunications, 30 TelecomB Networking Services Information

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Donald R. Riley, Professor...... 626-9816

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Access Information

SLIP: 2400/14,400 SLIP: ADI-100 and ITE (with	626-1920 n 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 V.32	625-6009 營 4-7539 營
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