UNIVERSITY COMPUTING

COMPUTING NEWS

Welcome to Computing at the U of O

Welcome to campus and another year of computing at the U of O. To help familiarize you with the various facilities and services offered by the Computing Center, this issue of *Computing News* is devoted to describing the Center's major resources.

For those of you who are new to the University, *Computing News* will keep you up-to-date on campus computing developments and offer occasional tips for solving common computing dilemmas. Copies are mailed to all faculty, staff, and GTF's, and are available in wall racks at the Computing Center. If you're not on one of these mailing lists and want to receive *Computing News*, contact the editor at x4394 for a subscription form.

Get Acquainted With Center Services

The Computing Center offers a number of computing-related facilities and services to the University community. For those of you who are new to the U of O, or have been out of touch with computing for awhile, here's a brief summary of our most popular resources:

Consulting - Center consultants are available weekdays (9 am - noon and 1 - 5 pm) in Room 207 to answer a wide range of computing questions. Consultants field questions on VAX 8800 statistics packages, communications software, and utilities; microcomputers, especially the Macintosh and and IBM's PS/2 lines; and microcomputer software, among other topics.

Note that consultants have different areas of expertise. Check the lists of experts and topics and the schedule posted in the consulting office to determine when you'll be able to find the most qualified help with your problem.

You may also call in questions at 686-4402 during consulting office hours, or send them via electronic mail on the VAX by typing

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$ mail
MAIL> send
To: consult@oregon
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Online inquiries are usually answered within 24 hours.

Education Program - Each term the Center staff offers a series of training sessions and workshops in the Computing Center (see article on training sessions in this issue). Most sessions are one hour long and are offered at no charge.

By special arrangement, Center instructors are also available to conduct special sessions at other sites on campus. If you're interested in scheduling a special session, contact Patrick Holleran at 686-4394.

Microcomputer Purchase Plan - University faculty, staff, and students may purchase Apple, IBM, and Zenith products at a substantial discount (see "Purchase Plan..." article below). The Microcomputer Support Lab staff in Room 202 of the Computing Center offers product demonstrations and assistance in selecting equipment to meet your needs. Call 686-4402 or visit the Support Lab between 9 am and 5 pm for prices and additional details.

Public VAX Access - The Center's public terminal room (105) provides 10 terminals for accessing the VAX 8800. Terminals are available on a first-come, first-served basis to campus VAX users.

Letter-Quality Printing - Time may be reserved on the Center's Apple LaserWriter printer in Room 202 to print out Macintosh documents. Cost is 20¢ per page.

Consultants are often available to help with printing problems. Call 686-4402 to make LaserWriter reservations or ask questions.

File Transfer - Users who wish to move files from one mainframe or microcomputing system to another can often find help in the Microcomputer Support Lab. Note that not all consultants may be familiar with all formats or the specific techniques necessary to move from one environment to another. Check ahead (x4402) to make sure someone will be available to help when you come in. Certain consultants may also be able to help people who have damaged a diskette.

Purchase Plan Offers Micro Discounts

The University's Microcomputer Purchase Plan allows U of O faculty, staff, students, and departments to purchase Apple, IBM, and Zenith microcomputer products at substantial discounts. For details on the Purchase Plan, you can pick up a set of instructions and price lists in the Center's Microcomputer Support Lab (Room 202) or Documents Room (205), the U of O Bookstore's Electronics Department, or the EMU Computer Shoppe. The Support Lab staff offers free demonstrations and assists with product selection.

Recent changes in product availability are listed below:

Apple

Several new products have recently been added to the

Apple selection, including

- Macintosh SE, with an internal 40 Mb hard disk and 2 Mb memory

- Macintosh II, with a 40 Mb hard disk and 4 Mb memory

- Macintosh IIx, featuring a 68030 processor with built-in page memory management unit (PMMU); a 68882 math coprocessor; 4 Mb memory; and a new 1.4Mb Floppy-Disk High-Density (FDHD) drive that can read and write all major 3.5" disk formats, including MS-DOS and OS/2

- Apple Scanner, a 40-bit, 300-DPI scanner capable of operating in line-art, half-tone, and grey-scale modes

Current prices for memory expansion kits reflect the worldwide memory chip shortage. Another price increase in mid-October is expected to affect selected systems, peripherals, and upgrade kits.

IBM

New IBM products covered by the Plan include

- Model 30 286, a new entry-level version of the Model 30, offering a 20 Mb hard disk, a 1.44 Mb diskette drive with twice the capacity of the earlier Model 30, and the potential to expand to 16 Mb of memory

- New 19" monochrome display

In addition, IBM has reduced prices on hard disk options for the Model 25.

Zenith

This fall, Zenith is adding several new Z-286LP models to the Purchase Plan. For a limited time, Zenith is also offering some promotional deals:

- Special prices on eaZy PCs

- Special Microsoft Works and Lap-Link options with SuperSport and TurboSport purchases (offer expires this week on September 30th)

Group Provides Micro Services

University departments and individuals faced with a microcomputing design or software need should investigate the Center's Special Services unit. This group provides a number of Macintosh and IBM PC/compatible design and programming services, including:

- **network design** - configuration and installation

- **database design** - development and implementation of single and multi-user applications, with documentation

- **evaluation** - consultation on electronic mail and other communications systems, file sharing, and disk sharing

The first two hours of evaluation are available at no charge. Work requiring more than two hours is billed at $30 per hour. For further information on special micro services, contact Susan Hilton, the group's coordinator, at x4394.

Training Session Schedule Set

Each term the Computing Center offers a series of introductory training sessions on various computing topics. These sessions are available to University faculty, staff, and students. Unless otherwise indicated, no registration fee is required.

All sessions are held in the Computing Center building and require pre-registration by calling 686-4394. Some sessions also require an active account on the VAX 8800. To open an account, see the accounting clerk in Room 107 at least one week in advance of the class.

Survey Sessions (1 hour, Room 245)	
U of O Computing Resources	Tues., 10/4, 3:30 pm
Statistical Computing	Wed., 10/12, 1:30 pm
Supercomputing at the U of O	Mon., 11/7, 3:30 pm
VAX Sessions (1 hour, Room 165, require VAX acct.)	
Introduction to VMS (repeated)	Tues., 9/27, 10 am Mon., 10/3, 1:30 pm
Intermediate VMS	Tues., 10/11, 4 pm
Introduction to EDT (repeated)	Thurs., 9/29, 10 am Wed., 10/5, 1:30 pm
Text Editing with EMACS	Thurs., 10/6, 10 am
Communications Sessions (1 hour, Room 245)	
Using UONet	Wed., 10/5, 1:30 pm
Mail & University Forum (UF)	Tues., 10/11, 1:30 pm
Mac/VAX Communications	Mon., 10/24, 11 am
PC/VAX Communications	Tues., 10/18, 4 pm
Macintosh Networks I	Tues., 10/18, 1 pm
Macintosh Networks II	Thurs., 10/20, 1 pm
Macintosh Sessions (2 hours, Room 175)	
Mac Orientation for Beginners	Thursdays, 10/6, 10/20 11/3, 11/17, 12/1 2:30 - 4:30 pm
SAS Course (8 2-hour sessions, Room 245, $50 fee)	
Introduction to SAS (requires VAX/VMS experience and SAS user's guide)	Mondays & Wednesdays Oct. 3-26 3-5 pm

Flyers giving a brief description of these courses are available at the Computing Center's reception counters.

NETWORK NEWS

UOnet Arrives!

UOnet, a communications network linking most campus departments with central computing facilities and each other, was installed in early July. It replaces the old LAN/1 broadband network, which provided access to the Center's VAX and IBM systems. The installation of UOnet brings dramatic improvements in data communications technology to the University

The UOnet backbone is a fiber-optic cable that currently links some 30 campus buildings. More buildings will be connected to the network later this fall. This cable is expected to provide the basis for campus data communications for at least a decade.

UOnet Capabilities

UOnet functions as the local gateway to the DARPA/NSF Internet, a coalition of national, regional, local, and military research networks. It serves as an alternative to the Gandalf Switch, providing terminal access to the Computing Center's VAX and IBM systems, the University Library's online catalog, the CIE student conferencing system, U of O departmental computing resources, and computers throughout the United States.

UOnet has been used initially to create an extended interdepartmental Ethernet network spanning the campus. Currently, Ethernets in the Computing Center, Science I, Science II, Huestis, Straub, PLC, Johnson, Gilbert, Chiles, and the U of O Library are connected via UOnet. Individual computers attached to building Ethernets can access resources anywhere on the campus network at full Ethernet speeds (10 Mbits/second). They can also access resources anywhere on The Internet through the U of O's NorthWestNet connection, at 56 Kbits/second.

Connecting to UOnet

Connections to UOnet terminal servers have replaced all LAN/1 connections on campus. Terminal server connections are also available to Gandalf users through class uonet, and to off-campus modem users at 1200 or 2400 Baud (see 2400-Baud access article in the adjacent column). From a UOnet terminal server, you can do the same things you can do using the VAX's TELNET command.

Terminal server ports are available for a connection charge of $250 plus wiring. This is the standard way terminals on campus will be connected to computing resources in the future.

To take full advantage of UOnet from a microcomputer, however, you should purchase an Ethernet card and attach your system directly to the network, using the public-domain software package, NCSA Telnet. This package is available for checkout in the Documents Room (205).

NCSA Telnet provides the opportunity for multiple simultaneous terminal sessions, improved graphics terminal emulation, and file transfer speeds at least 40 times faster than those achieved by the Gandalf Switch.

Direct UOnet connections also offer potential access to a wider range of distributed services, such as local electronic mail, file sharing, and distributed databases.

UOnet's Advantages

UOnet is much more than just a better way to connect terminals and micros. It provides high-speed connections between computers that support TCP/IP, DECnet, Novell, and other network protocols. A user on a departmental microcomputer, for example, can transfer a data file to an NSF supercomputer; send electronic mail to another computer on campus, or to any of some 3,000 BITNET or 40,000 Internet computers across the country; or can run a distributed program with a user interface running on one computer, data files on another, and major computation on a third. The network is also the basis on which we are building a much-expanded campus electronic mail system.

We are excited about the new developments in campus networking. The University is rapidly moving away from microcomputers as stand-alone word processors and timesharing terminals, toward a modern, integrated computing environment. A future issue of *Computing News* will focus in greater depth on the structure of the network, the services it provides, and plans for future growth.

- JQ Johnson

2400-Baud UOnet Access Available

Access to UOnet at 2400 Baud is now available to off-campus users. Any terminal or microcomputer user with a standard 2400-Baud (v. 22bis) modem can access UOnet by dialing 686-3560.

The Center has installed eight new 2400-Baud dial-in modems, all of which support MNP level 5 and X.PC data compression. Users with MNP level 5 modems can expect to see effective data transfer rates as high as 4800 Baud.

New Quickdocs Online

In an effort to speed new information to Computing Center users, online documents called Quickdocs have been added to the VAX 8800's online resources. Quickdocs provide information on popular topics of interest, such as the EMACS and EDT editors, supercomputing at the U of O, communications accounts, applicatons software like LINDO and SCA, etc. Some Quickdocs have been written by Center staff; others have been collected, condensed, or adapted from external sources. To view a list of current Quickdocs with brief descriptions, type
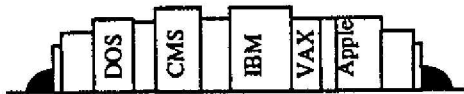
    $ type sys$document:index.quickdoc

from VMS.

Quickdocs are ASCII text files, without control characters or special formatting. They may be printed

directly from the VAX or downloaded to any other computer and printed on any printing device. To print a Quickdoc on the VAX, type

$ print sys$document:*docname*.quickdoc

from VMS, identifying the name of the one you wish to print.

Quickdocs are not as carefully edited or formatted as standard Computing Center write-ups and handouts. If you encounter errors or other problems in a Quickdoc, please report them to a consultant (x4402).

Visit the Documents Room

New Computing Center users may be surprised to find a well-stocked computing documents library upstairs in Room 205. The Documents Room collection includes the following materials, many of which are not available elsewhere on campus:

- several hundred books on all aspects of computing

- manuals and locally-prepared write-ups for the Center's IBM and VAX systems and supported software

- over 100 periodicals, many on microcomputers

- a reference collection of literature indexes, hardware and software directories, and reviews

- over 200 newsletters from educational computing organizations and microcomputer user groups

- public-domain software for IBM PC and Apple Macintosh microcomputers, which can be checked out and copied freely

Anyone is welcome to use the collection and check out items. Books and newsletters may be borrowed for one week; public-domain software and back issues of periodicals may be checked out for two days at a time.

Please call 686-4406 if you have any questions...better yet, drop by for a visit! The Documents Room is open Monday - Friday, 9:30 am - 5:00 pm, with reduced hours between academic terms.

- Betsy Shaw

STAT CORNER

The Computing Center staff provides support for a wide range of statistical computing software at the U of O. Here's a review of the statistics resources available at the Center in Fall '88:

Mainframe Packages - The VAX 8800 is now firmly established as the University's primary statistical computing environment. Numerous statistics programs are available on the VAX, including five major packages: SAS (with SAS base products SAS/Graph, SAS/ETS, and SAS/IML), SPSSx, BMDP, Minitab, and the IMSL collection of FORTRAN subroutines. Several special-purpose packages are also available, including SCA (a time-series analysis package) and LISREL (analysis of covariant structures).

Microcomputer Software - U of O faculty, staff, and students may rent SAS/PC, the MS-DOS version of SAS, from the Computing Center. The fee for a year's use of the package is $100. SAS/PC requires at least 512K bytes of memory and a 20-megabyte hard disk. Contact Joe St Sauver (686-4394) for details on renting SAS/PC.

Documentation - The Documents Room stocks a number of manuals published by the vendors of major statistics packages. In addition, Center write-ups describing how to use each package on the VAX 8800 are available for check-out or purchase. You may also consult online help files for all supported packages and "Quickdocs" (see related article in this issue) for some of the others.

Other statistical computing references available in the Documents Room include workbooks and textbooks, technical reports, and newsletters from software vendors.

Online Bulletin Board - An electronic "bulletin board" on the VAX posts notices of interest to users of statistics software. To view this information, type

$ stats

from VMS.

Consulting - Statistics consultants are available to answer questions between 10 am and noon and 1 and 3 pm in Room 207 of the Computing Center. There is no charge for this service.

Training Sessions - This term the Center is offering two statistics training sessions in Room 245 of the Computing Center:

- *Statistical Computing* - a 1-hour overview, Wednesday, October 12, 1:30 pm

- *Introduction to SAS* - 8 2-hr sessions, Mondays and Wednesdays, October 3-26, 3 - 5 pm. Prerequisites: VAX/VMS experience, and the SAS *User's Guide: Basics* manual. Fee: $50.

- Patrick Holleran (holleran@oregon)