February, 1995 The Computing Center

University of Oregon

Eugene, Oregon 97403

Vol. 10 #4

Remote Access Refresher Course ... 2-3

Mac Keyboard Tricks 3

Telnet 2.6 Resolves Some Problems... 4

Security/Safety Tips for Computer Facilities Managers

As microcomputer labs and electronic classrooms proliferate on campus and become more and more essential as study and teaching tools, effective facility management has evolved into an increasingly complex task. Here's a checklist of tips and precautions the Computing Center staff has compiled to assist facility managers on campus:

Environment

- 1. Electricity
 - Control and secure access to electrical power.
 - Properly ground the electrical system and computing equipment.
 - Provide a separate electrical circuit for each major microcomputer system and a backup power supply.
- 2. Water dangers
- Locate equipment in an area away from water and steam pipes in ceilings, walls, and floors.
- Make sure floors and ceilings are protected by proper drainage and porosity controls.
- Fire resistance
- Avoid storing flammable liquids, large electric panels, paint, large volumes of paper, or other potential hazards in contiguous rooms. Control paper dust.

- 3. Fire resistance, continued

 Install smoke detectors and make supe fire extinguishers are readily accessible.
 - Make sure room furnishings are resistant to fire and static electricity.
- 4. Provide sufficient ventilation space around microcomputers and printers.
- 6. Provide environmental controls (air conditioning, heat, humidity, non-glare lighting, fresh air exchange) to ensure safe storage of computing equipment and user comfort.

Access

- 1. Control the distribution of building and room keys and alarm combinations, and change them frequently. Restrict access to authorized personnel.
- 2. Check windows and the building perimeter —do they present theft opportunities?
- 3. Use an alarm system to protect the area when it is not being used, keeping in mind that faculty who teach in the room may need access to it outside their class time.
- 4. Use video cameras where appropriate.
- 5. Designate responsible persons to contact in case of emergency.

Software and Data

- 1. Make sure a company i.d. and protection statement accompanies each licensed program.
- 2. Install internal software protection devices to prevent unauthorized access or tampering.
- 3. Test for viruses and worms before new software is installed.
- 4. Keep current backups of your software and data files, and store them at a secured off-site location, away from magnetic fields.
- 5. Provide adequate physical security for both on- and off-site software storage.
- 6. Provide a written policy on loading and using non-departmental software and data.
- 7. Keep documentation current and readily available.
- 8. Provide software orientation and training for new users.

BANNER/VMS **Maintenance Schedules** Combined

Sunday, January 15, marked the beginning of a new combined maintenance schedule for BANNER and the VMScluster.

Under the new schedule, the BANNER system is taken off line every Sunday from 5pm to approximately 10pm for a full backup of the database. When the backup is complete, the VMS operator immediately shuts down the VMScluster and initiates a cluster-wide reboot. In most instances, both BANNER and the VMScluster systems will be available again by midnight.

The regularly scheduled Monday evening maintenance has been eliminated, except for occasional vendor maintenance. When this occurs, users will be notified in advance via log-in message.

If you have further questions regarding the new maintenance schedule, contact Ken Thomas, the Operations Supervisor (phone: 346-1743; e-mail: kthomas@oregon.uoregon.edu).

- continued on page 3

Remote Access Refresher Course...

Increasing numbers of UO students, faculty, and staff have personal computers at home and want to know more about how to use a modem to access UOnet, the campus network.

To help answer some of the most common questions about remote access, we've reviewed the steps you'll need to take to complete your off-site connection. For a quick overview of the minimum hardware requirements for each type of connection, refer to the table on the right.

Types of Connection

There are two distinct types of remote access connection you can establish from a home computer:

 Terminal emulation, which makes your home computer "look like" a terminal that is directly connected to a timesharing computer on campus that is on UOnet.

This type of connection works well even with slow modems and older equipment, but handles text-only data transfers (no multimedia). Terminal emulation service works fine for Janus (the UO Library's information server and catalog) and sending and receiving local e-mail.

Remote access, a faster and more sophisticated type of connection, which makes your home computer operate as if it were physically "plugged in" to UOnet.

You'll need to have this type of connection if you want to run more sophisticated network and multimedia applications like *NetscapelMosaic* and *Eudora* from home.

Macs	PCs
68030 CPU, or greater	80486 CPU, or greater
8MB RAM	4MB RAM (*8MB recommended)
System 7.1+	Windows 3.1 and DOS 5.0+
14,400-bps modem, or higher	14,400-bps modem, or higher
10-15MB available disk space	High-speed serial port (16550A UART)
a 256+-color monitor	3 1/2" high-density floppy drive
	VGA Graphics (256+ colors recommended)
	15MB available disk space

Getting Started

Aside from having the right hardware and software for a remote connection, you'll also need to have a computing account or network i.d. to verify your affiliation with the UO, as described below.

Terminal emulation. For terminal emulation connections, you'll need an account on one of the UO's three timesharing computers, oregon, darkwing, or gladstone. If you don't already have a timesharing account, you can get one by running a program called AUTHORIZE.

Remote Access: Remote access users need to set up a network username ("netid") and password, which is also done by running AUTHORIZE.

For more details on how to get a timesharing account or

netid, pick up a copy of the free handout, "How to Get a Computing Account" from the Computing Center Documents Room (205).

Problems With Remote

PC users whose machines are equipped with older internal modem ports have recently experienced some problems in trying to access UOnet remotely. The likely villains are internal modem adapters installed by the manufacturers, which sometimes conflict with other hardware devices.

2

To avoid such Access from a PC?

problems, the Computing Center staff recommends using an external modem plugged into a COM port that is driven by a UART with a 16550 series chip. If your PC has an older UART (16450, 8250/9, etc.), we recommend you upgrade it to a 16550.*

The way a UART is upgraded varies with each machine, so you'll need to contact your vendor for specific instructions. Generally speaking, if you can disable your existing ports, you can purchase a serial card driven by a UART 16550 for about \$40.

If you have further questions concerning remote access, contact the Microcomputer Consulting and Services office in Room 202A Computing Center (e-mail: microhelp@oregon.uoregon.edu; telephone: 346-4412).

* To find out if you have a high-speed serial port, run the MSD program from within Windows. Choose the option to look at your COM ports and see if the UART chip used is a 16550 series chip. If you need more help, the PC remote access manual "UOREADME" (on disk 4 of the software installation set) gives detailed instructions on how to do this. A printed copy of this manual may be purchased from the Computing Center Documents Room for \$1.00.

Connecting from a Home Macintosh

External vs. Internal Connections. Unless you own a PowerBook with a built-in modem, the Microcomputing Support Center staff recommends buying a good quality external modem for your Mac.

Required Software. There are two remote-access software packages available for Macintosh users: InterSLIP and ARA 2.

- continued on page 3

Safety Tips..

Hardware

- Formulate a written policy for managing your department's hardware and peripherals.
- 2. Provide orientation and training for new users of the equipment.
- Install physical security devices (such as anchor pads) or keep hardware secure.
- Make sure that more than one person knows who to contact if one or more of your systems fails.
- 5. Provide log-in password protection.

- 6. Provide backup equipment for all vital hardware, and alternate methods of operation in case of hardware failures.
- 7. Keep a current inventory list for each piece of equipment, including
 - a description
 - the date and place it was purchased
 - its model and warranty numbers
 - your i.d. number (posted on unit)
 - the manufacturer's serial number
 - its location
- 8. Train personnel in orderly procedures for powering-up and shutting down equipment.



Cut Switching Time for Mac Users

Macintosh users often ask if there is a keyboard shortcut for switching back and forth between concurrently running programs.

Good news! The answer is yesprovided, that is, you have Microsoft Office installed on your Mac. If you do. you can switch from the program you're working in to any other program that's running (even non-Office programs) simply by holding down the Command key and pressing Tab. A message box appears showing the name of a program that is currently running. Continue to hold down the Command key and press Tab repeatedly until the name of the program you're looking for appears. When you release both of the keys, you'll be in this program. (Note for Microsoft Windows users: This is analogous to the Ctrl/Tab shortcut for all Windows applications on a PC.)

If you'd like to have quick access to other programs you use frequently, you can add programs (even non-Office ones) to the Microsoft Office pull-down menu, as follows:

- Pull down the Office menu and select "Customize." This opens the Office Manager dialog box, which lists all the Office programs that can be included in the pulldown menu. Check the items you wish to display on the menu.
- Then, select the "New" button. This brings up a dialog box that allows you to add any program file you want.

- continued on page 4

Remote Access, continued...

InterSLIP may be copied from the Network Software folder in the CC Public Domain library. It provides free access to such TCP/IP applications as Netscape, Telnet, Eudora, and Gopher. Unlike ARA 2, InterSLIP does not allow you to share files using AppleShare, or to share printers.

ARA 2 is a commercial package that allows you to do everything InterSLIP does, plus access shared Macintosh volumes and printers from home. It may be purchased from the Microcomputer Purchase Plan (Room 202 Computing Center) for about \$45. (Unless you need to share files with AppleShare or use a shared printer from home, you should run InterSLIP.)

Documentation. For more details on how to set up a remote access connection from your home Macintosh, consult the document titled "University of Oregon Network Resources Remote Access - Macintosh Edition," which is available for purchase in the Documents Room.

Connecting from a Home PC

External ws. Internal Connections. External modems are recommended. Most PCs have pre-installed COM ports that allow you to plug in an external modem or other serial device. To use an external modem that operates at 14,400 bps or faster, you must have a COM port managed by a UART 16550. See the article in this issue titled, "Problems with Remote Access from a PC?" for an explanation of this requirement.

Required Software. The Computing Center Documents Room distributes two inexpensive remote-access packages for PCs: Shiva Remote PC and Winsock.

Run Shiva Remote if you need to access a Novell file server (to print files on a campus printer, for example). If you do not need to connect to a Novell file server, you should use Winsock.

Both Shiva Remote and Winsock are available for copying in the "Dial-in" folder on the ZEUS public domain file server. Both packages are documented in a Read Me file in the same folder. For assistance in copying and installing this software, contact the Microcomputer Consulting and Services office in Room 202A Computing Center (e-mail: microhelp@oregon.uoregon.edu; telephone: 346-441). If you have network problems or requests for network hardware, contact Network Services (phone: 346-4395; e-mail: nethelp@oregon.uoregon.edu).

3

Telnet 2.6 Resolves Mac Keyboard/ BANNER Problems

Mac users who have been experiencing problems with keyboard emulation or connecting to the BANNER system via *Telnet* should consider installing *Telnet* 2.6. This new version of *Telnet* is configured to emulate a VT100 or VT102 terminal, which works better than VT220 emulation for most UO users. To install *Telnet* 2.6,

- 1. Pull down the Apple menu and select "Chooser"
- 2. Select the "AppleShare" icon in the upper left corner of the Chooser window.
- Scroll down toward the end of the "AppleTalk Zones" list and click "UOnet."
- 4. Select "CC Public Domain" as the file server from the list in the upper right corner of the Chooser window and click "OK."
- 5. Connect to the file server as "Guest" and click "OK" again.
- 6. When the next menu window appears, select "CC Public Domain," then "OK" once more.
- 7. The CC Public Domain volume now appears on your desktop. Open it. Then open the "Network Software" folder, followed by the "Telnet" folder.
- 8. Drag the "NCSA Telnet 2.6" folder to your hard drive.

Notes:

- You do not need a *config.tel* file in your System folder with *Telnet* 2.6. Once you've installed it and are sure it's working, you can delete your old version of the program and its *config.tel* file.
- Check to confirm that your new *Telnet* is emulating a VT100 terminal by pulling down the "Edit" menu, selecting "Preferences," then "Terminals" on the sub-menu to the right. Double-click "<Default>" to display the terminal settings. If the "Emulation" field shows VT220 selected, click "VT100."
- To avoid all possibility of future problems, clear your hard drive of any timesharing computer icons (e.g., OREGON, DONALD, DAISY) from earlier versions of *Telnet* and replace them with *Telnet*. 2.6 icons.
- A BANNER icon is included with Telnet 2.6. You can double-click this
 icon to connect to DAISY, BANNER's current home on the VMScluster.

Questions?

If you have further questions about using *Telnet*, contact the Microcomputer Consulting and Services office in Room 202A Computing Center (e-mail: *microhelp@oregon.uoregon.edu*; phone: 346-4412). The office is open Monday through Friday from 9 am to 5 pm.

Computing News is published twice a term during the academic year by the Documentation Services group of the Office of University
Computing, Computing Center, University of Oregon, Eugene, OR
97403. Telephone: (503) 346-1724

Newsletter Editor: Joyce Winslow (jwins@oregon.uoregon.edu) Editorial Adviser: Dave Ulrich (du@oregon.uoregon.edu)

You may reprint articles from Computing News, provided you credit the source

Eugene Free Net Offers Networking Alternative

If you don't have a UOnet account and are looking for an alternative Internet service provider, Oregon Public Networking (a.k.a., Eugene Free Net) may fill the bill.

Eugene Free Net (EFN) is a full-service Internet provider, with a full range of options to choose from. EFN works to provide access to everyone, and its service is free to those who are unable to pay. For those who can afford to pay, a donation of \$7 per month is suggested. For a setup fee of \$20, subscribers may also purchase a Dialup Internet Protocol (DIP) priority access account.

To access EFN from your modem, dial **687-2996**, and log in as **guest** (no password is required).

For more details about Eugene Free Net, contact Oregon Public Networking, P.O. Box 1914, Eugene, OR 97440 (voice mail: 484-9637; e-mail: office@efn.org). For an automated message about general access, the e-mail address is info@efn.org.



 Once you've found a program you want to add, highlight it and click the "Add" button. The program is then added to the Office Manager dialog box list. Check it if you wish to have it displayed.

That's all there is to it. Now all the programs you've added are easily accessible from a pull-down menu.

4