

COMPUTING NEWS

FALL 2000

**Almost TWICE
as many
modems!**



One modem number! Now there's only one modem number to remember when you dial in to the campus network: **225-2200**. See story on page 2.

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Access to UO Modem Pool

No more separate modem accounts! Just use your UO Darkwing, Gladstone, or Oregon email username and password to dial in



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The old "modem account" system is being eliminated, making way for a simpler and more secure method of accessing the UO modem pool.

If you have an account on any of the central computing systems (Gladstone, Darkwing, or Oregon), you have access to the modem pool. The username and password for your Gladstone, Darkwing, or Oregon account are now essentially the same as the ones you'll use for dialin access.

Configuring Your Dialin Settings

If you know your password on the central system, it will be exactly the same for dialin. If you change your password on the central system, the change will work immediately and will automatically become the dialin password as well.

However, when configuring your dialin settings, you must observe one very important difference: the username in your dialin configuration must include the machine name (e.g., @gladstone, @darkwing, @oregon). Otherwise, the dialin authentication mechanism won't be able to find your account. *The easy way to remember this is to simply use your UO email address as your dialin username.*

For example, if users **susie**, **billy**, and **bobby** have accounts on **Gladstone**, **Darkwing**, and **Oregon** respectively, this is the way they'd enter their usernames in the dialin settings:

susie@gladstone.uoregon.edu
billy@darkwing.uoregon.edu
bobby@oregon.uoregon.edu

(**Note:** the unqualified form of the machine name is also acceptable, so susie@gladstone, billy@darkwing, and bobby@oregon would work as well.)

Getting a Computing Account

One important repercussion of the new system is that you **MUST** have an account on Gladstone, Darkwing, or Oregon to use the UO modem pool. So...how do you get it?

If you're a new student... you will already have an account on Gladstone assigned to you. If you haven't yet accessed Gladstone, you can find your initial Gladstone account username and password by checking

<http://duckweb.uoregon.edu/>

If you're not a new student... you can establish an account on Gladstone by using AUTHORIZE, an online method to create accounts or change passwords. To use the AUTHORIZE program, you must know your personal access code (PAC), which is the same number you use to register for classes. For complete instructions for accessing and using AUTHORIZE, see http://micro.uoregon.edu/get_started.html

If you're UO faculty or staff... you'll need to bring your photo ID to the Microcomputer Support Center (151 Grayson Hall) and fill out an account request form in person.

Making the Transition from Old to New

This new modem access mechanism is currently active and running, but the old modem account authentication will also continue to work for the first four weeks of fall term (until October 23). This interim period was designed to allow users time to switch their username/password in their dialin settings from the old configuration to the new configuration. After the October 23rd cutoff date, however, modem accounts will no longer be used for dialin access.

Note: In a very real sense, your dialin access will be a reflection of the state of your central computing system access. The policies and procedures used to maintain the central system account transparently flow through to dialin access as well, so it's important to review these policies and understand them. Copies of the "Password Policies and Procedures" document are available from the Computing Center Documents Room Library (175 Grayson) and online at http://cc.uoregon.edu/docs/passwd_policy.html

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Simplified...

Special Reminder for Faculty/ Staff Modem Users...

Very little effort will be required for students to adapt to the new dialin authentication system. Since most students already have an account on one of the required central systems (i.e., Gladstone/Darkwing/Oregon), they will simply change their dialin settings so that the username is their email address, and the password is their central system account password. Students will likely be entering the new modem phone number **225-2200** at the same time.

But for a number of faculty and staff, the change may require a bit more effort. An account on Darkwing, Oregon, or Gladstone is now a prerequisite to using the modem pool. Faculty and staff who do not currently have an account on one of these systems will have to apply for a new account.

Faculty and staff who require new accounts may proceed directly to the Accounts desk in 151 Grayson Hall. They must present a valid photo ID and select a username and password while applying for new account. New accounts for faculty or staff will be created on Darkwing and Oregon. Once an account is active, the account information can then be used for dialin, as described on page 2.

After October 23rd, the old Modem Account information will go away, and anyone still using the old information will not be able to connect to the modems. Your patience and understanding is appreciated as we migrate to this new, more secure, and ultimately less confusing system for modem access.

Dialing In?

Now there are nearly twice as many modems, only one modem number... and no separate modem account is required

Over the summer, the UO's modem pool nearly doubled in size, to a total of 576, and all the old modem numbers were phased out to make way for a single new number: **225-2200**. The new modems are all connected through AT&T, and are less expensive for the university.

To access the modem pool, dial **225-2200** and use your full UO Computing Center email username address (e.g., jersmith@gladstone.uoregon.edu, jersmith@darkwing.uoregon.edu, or jersmith@oregon.uoregon.edu) and your email account password to log in. (For more detail, see "Access to UO Modem Pool Simplified" on page 2.)

Questions?

If you have questions about any of these changes, contact Microcomputer Services at microhelp@oregon.uoregon.edu, call them at **346-4412**, or visit their new help desk on the ground floor of Grayson Hall (Room 151). You might also want to check out their modem information page at

<http://micro.uoregon.edu/modeminfo/>

Wondering How to Get Online?

If you're a new student, you may be wondering how to get started using your email account.

There are three ways to get your email information:

- via DuckWeb (<http://duckweb.uoregon.edu>)
- in person at the Microcomputer Support Center (151 Grayson Hall)
- via the AUTHORIZE system (to access

it, enter [telnet://authorize.uoregon.edu](http://authorize.uoregon.edu) in your web browser's "Location" or "Address" field)

Complete instructions for each of these methods are outlined in the handout, "NEW STUDENTS: GET ONLINE," available in the Computing Center's Documents Room Library (Room 175 Grayson) and online at

http://micro.uoregon.edu/get_started.html

Note: All the software you'll need for these operations is available on the new 2000 Duckware CD-ROM (see story on page 7).

If you don't have a UO computing account, pick up a copy of "How to Get a Computing Account." This handout is also available in the Documents Room Library (175 Grayson), and online at

<http://cc.uoregon.edu/docs/getanaccount.html>

New to Campus? Get Acquainted with

Microcomputer Services

If you have Windows or Macintosh dilemmas of almost any description, Microcomputer Services can help.

Located on the ground floor of Grayson Hall in **Room 151**, this facility is staffed with consultants who can answer questions about a variety of hardware and software conundrums, including

- how to get connected to the Internet from home or on campus
- new student computing accounts information
- password problems
- virus problems and protection
- system software configuration, troubleshooting, and installation
- damaged files and disks
- public domain software distribution

Student Accounts. Microcomputer Services staff can help with student accounts and password changes. But with a student ID number and PAC code, new students can also obtain their account information via DuckWeb (<http://duckweb.uoregon.edu>) For complete information about student accounts, see <http://micro.uoregon.edu/getconnected/> or pick up a copy of the handout "New Students: Get Online!" in Room 175 Grayson (the Computing Center's Documents Room Library).

Machine Check-In. For customers who encounter complex or hard-to-diagnose problems, Microcomputer Services offers a machine check-in service. This service costs \$60.00/hour with a minimum charge of \$30.00 and is tailored for machines with complex software problems that cannot be resolved by the end user. Typical problems include those that require reinstallation of operating system software, diagnosis of corrupt data, virus removal, and resolution of particularly difficult hardware conflicts that manifest themselves in software.

Multimedia Facilities. Room 151 Grayson Hall also has public stations for scanning, CD copying and burning, and digital video acquisitions. (Of course, as in all electronic copying activities, copyright restrictions must be observed.) These services are available to UO students, faculty, and staff. Current services include:

PC Station - Windows 98, 45 GB disk, 256 MB RAM, Firewire support, Plextor 8x20 SCSI CD-R, Viewsonic G790 19" monitor):

- scanning - OCR (Optical Character Recognition), regular, and slide
- CD-ROM creation and duplication
- video in and out
- direct VHS/S-VHS into MPEG-1 in real time
- direct VHS/S-VHS into MPEG-2 in real time
- Some editing features using Adobe Premiere, Photoshop, etc.
- Zip (100 MB) and Jazz (2 GB) drives

Mac Station - currently geared toward basic scanning and CD-R creation/duplication; future hardware upgrades are planned:

- scanning
- CD-ROM creation and duplication
- some editing features using Adobe Photoshop
- Zip (100 MB) and Jazz (2 GB) drives

To make this experience more enjoyable, both the Mac and PC have 8X CD-R drives. This means you can write or duplicate your CDs at timesaving 8X speeds. The PC is also outfitted with two 18.1 GB, high-speed SCSI hard drives to facilitate the capture of large video files. To speed the transfer of data over UOnet, both machines have 100Mb/sec Ethernet connections.

You may purchase up to 5 CD-R disks at \$2 each in Room 151 if you wish. If you need more, you'll want to purchase them before coming in. ZIP or JAZZ cartridges are not available.

The idea behind these stations is to provide a place on campus where

members of the campus community can stop in and use multimedia services at their leisure. Microcomputer Services staff is available to assist you with basic use and start-up questions. If you need in-depth training on how to create CD-ROMs, capture video, edit images, etc., you will probably want to take some classes first. (Of course, as in all electronic copying activities, copyright restrictions must be observed.)

Each station has a one-hour time limit, and you may reserve time in advance by contacting Microcomputer Services (microhelp@oregon.uoregon.edu, **346-4412**). Or, stop by Room 151 in person. They're open from 9 am to 5 pm, Monday through Friday. Please let them know if you prefer a Mac or PC station, the time and date you'd like to reserve, and how they can contact you in case of scheduling conflicts.

Contact Information. For more information about Microcomputer Services, email microhelp@oregon.uoregon.edu or call **346-4412**. Support hours are 9 am to 5 pm Monday through Friday.

Visit the Microcomputer Services web site at <http://micro.uoregon.edu/> for a variety of useful information specific to computing at the UO.

Documents Room Library

Looking for a book on Java, a copy of Linux, or a video on Photoshop? The Computing Center's Documents Room Library (**Room 175 Grayson**) offers a collection of books, magazines, CDs, and instructional videos on a wide range of popular computing subjects. It also maintains a CD-ROM database to help locate magazine articles and product reviews.

Hours are Monday through Friday, 9:30 am to 5 pm. Books can be borrowed for two weeks, videos for one week, and magazines for two days. Call **346-4406** for information or visit the Documents Room web site at <http://darkwing.uoregon.edu/~docsrm/>

Some of Our Microcomputer Resources

Computing Labs

The Computing Center administers several computing labs that are available to all UO students. These labs are located in the EMU, Millrace I, in the basement of Klamath Hall, and on the ground floor of Grayson Hall.

CC-EMU Lab. The CC-EMU Micro-computing Lab is a Macintosh and DOS/Windows computing facility designed with word-processing, desktop publishing, spreadsheets, and electronic communications in mind. The lab is located in Room 22 in the basement of the EMU near the Recreation Center and Arcade. For recorded information about the lab, including its hours of operation and special announcements, call **346-1769**.

Millrace I Lab. The Millrace Lab comprises an instructional lab and a small open lab. Both labs are equipped with MacG3s and offer color scanning and laser printing, as well as a wide range of graphics software. Call **346-0316**.

CC-Klamath Lab. The CC-Klamath Lab is located in room B13 and B26 of Klamath Hall and comprises three instructional classrooms and a large open lab. The labs are equipped with Mac G3s and Windows machines, color scanners, and laser printers. **346-4781**

CC-Grayson Lab. This new facility, located on the ground floor of Grayson Hall, comprises both an open-access lab (Room 101) and an instructional lab (Room 101A). Both labs are equipped with Windows machines, and the open lab has a color scanner and a laser printer. Call **346-0787**.

Other Campus Computing Labs:

Knight Library ITC - 346-1935

Science Library ITC - 346-1331

Social Science Instructional Lab - 346-2547

Need More Information? For complete details about the software and services in all of these labs, as well as other computing labs on campus, see <http://cc.uoregon.edu/campuslabs.html>

E-shop Repair, Upgrade Services

Whether your computer's on the blink, you need more RAM, or you're dreaming of building a custom system, the Computing Center's Electronics Shop ("E-Shop") has the solution.

Conveniently located on campus in Room 151 Grayson Hall, the E-Shop offers extensive personal computer hardware support and repair services to UO students, faculty, and staff. Its technicians are experienced with many brands of microcomputers and peripherals, including Apple and Windows/Intel machines, and can also offer advice regarding upgrades.

Apple Computer Repair. The shop is a Level 1 Apple-authorized service center and can perform warranty, AppleCare, and out-of-warranty repairs on nearly all Macintosh models and peripherals.

Windows/Intel Computer Repair. A Dell certified Tier 1 Service Provider, the shop can perform non-warranty repairs on all desktop and laptop models. On-campus warranty and out-of-warranty service is also provided on all Tangent computers, and non-war-

ranty repairs are offered for most Windows/Intel machines.

Upgrades. Whether you need more memory, a larger hard disk, or would like to add another new peripheral, the technicians can help you determine the best and most cost-effective way to upgrade your machine. The shop keeps memory in stock for virtually all Macintosh and Windows/Intel-based desktop computers, and other items can be ordered upon request.

Custom Systems. If you need a custom system configuration, like a server with multiple SCSI controllers and mirrored disk drives, talk to the technicians. The shop may be able to build you a machine at considerable savings.

Upgrades and out-of-warranty repairs are charged on a time-and-materials basis. The current labor rate is \$60/hour, with a half-hour minimum.

Hours and Policies. The shop is open from 8 am to 5 pm Monday through Friday, except holidays.

All shop services are available on a first-come, first-served, carry-in basis. On weekdays, bring your computer equipment to 151 Grayson Hall and check it in with the receptionist. UO Bookstore customers can also drop off equipment from 10 am to 6 pm Saturday and from noon to 6 pm Sunday at the Bookstore's electronics department. The E-shop will call you when the work has been completed, and you may pick up your machine at the Grayson Hall reception desk.

Who to Contact. If you have any questions concerning repairs or upgrades, send an email message to hardwarehelp@oregon.uoregon.edu, or call Jeff Hite or Rob Jaques at **346-3548**.

New Star Office Suite Available

Joel Jaeggli
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StarOffice, the feature-complete replacement for the Microsoft Office 97/98/2000 suite, was introduced to campus users on last year's Duckware CD-ROM.

While the UO's site license for Star Office 5.1 has expired, a new version (Star Office 5.2) is now available free from Sun Microsystems, and we have

obtained a license to distribute it to UO-affiliated users.

Star Office 5.2 is available on the Windows version of the Fall 2000 Duckware CD, and copies of Star Office 5.2 for Windows and Linux are also available from the Computing Center Documents Room Library (175 Grayson Hall).

Key Computing Center Services Relocate to Grayson Hall Annex

Micro Services, Computer Accounts, E-Shop, Documents Room, and computer labs are now open for business in Grayson Hall

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Earlier this month, several key Computing Center services began moving into their spacious new facilities on the ground floor of Grayson Hall.

Microcomputer Services, Computer Accounts, the Electronics Shop, the Documents Room Library, and two new microcomputer labs are now ready to serve you in their new location.

Microcomputer Services (Room 151, 346-4412)

The new Microcomputer Services help desk area is located at the north end of the building in Room 151. If you have questions about UO computing accounts or need help with a personal-computer related problem, this is the place to visit.

Multimedia Facilities. You'll also find several multimedia stations nearby for scanning images, capturing video, and manipulating large media files.

Computing Accounts (346-1738). Account clerks are available to assist you



The new help desk in Room 151, shown here in its first week of operation, offers consulting on a wide variety of microcomputing issues and assists with computer accounts. Electronics Shop ('E-Shop') reception, for delivery and pick-up of repaired and upgraded systems, is also located here.

with account access and password questions and to process administrative requests for BANNER access and password changes.

Documents Room Library (Room 175, 346-4406)

The new library is located on the south side of the building facing the central

courtyard. There is plenty of seating near windows overlooking the courtyard, and carrels where students can connect their laptops to the Internet.

Electronics Shop (Room 151, 346-3548)

The reception desk for hardware repairs/upgrades is also located in Room 151 at the north end of the building, conveniently close to the loading dock and parking.

Microcomputer Labs (Rooms 101 and 101A, 346-0787)

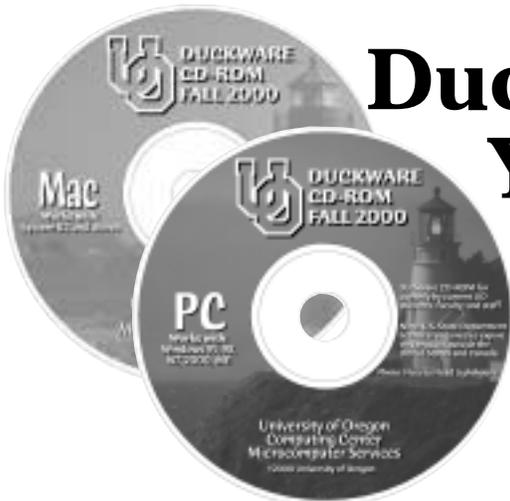
A new open-access lab and an instructional lab are across the hall from the Documents Room. The open lab is equipped with 20 Windows machines, a color scanner, and a laser printer, while the instructional lab has 20 Windows-based computers with an LCD projection unit.

Instructors wishing to reserve the instructional lab should contact Mary Bradley at 346-1737 or send email to mbradley@oregon.uoregon.edu



Partial view of the spacious new Documents Room, located just south of the help desk and across the hall from the new CC-Grayson Computing Labs.

Duckware 2000 CD Gives You a Head Start



The new CD has just about everything you'll need for computing at the UO

Duckware 2000 is here! As it does each fall, the Computing Center's Microcomputer Services group has released an updated version of the Duckware CD-ROM.

The new Duckware CD contains just about everything you'll need for computing at the UO: antivirus software, Star Office, and a network applications installer for web, news, email, and file transfer applications.

Like Duckware '99, Duckware 2000 comes in separate versions for Mac and Windows. These are available to all current UO students, faculty, and staff at no cost.

This year's version includes several notable new features, including:

- Encrypted Telnet connections on the network applications installers
- "Nifty Telnet" SSH encryption software for both Windows and Macintosh
- IMHO, a new web-based email interface for Gladstone and Darkwing users that's fast and more secure than other web-based email services (see "IMHO Webmail..." on page 10).

What Can Duckware Do for You?

The Duckware CD-ROM contains software that can help you connect to the Internet from home or on campus. This includes network application install-

ers for MacOS and Windows. Detailed instructions and troubleshooting tips for getting set up are also included in the Duckware interface.

Other updated applications that make the new CD a very useful tool include:

- **Norton Antivirus for both Mac and Windows.** Antivirus versions included on last year's Duckware '99 remain current. Use "Live Update" to get minor patches and new virus definitions.
- **Star Office 5.2 (Windows CD only).** This productivity suite mimics much of Microsoft's Office product, including the ability to read and write Excel, Word, PowerPoint, and Access Database files.
- **Cisco IPTV v 3.0.** The IPTV Viewer enables you to view diverse broadcast programming on your computer, including university lectures, foreign language programs and scientific projects, UO Today interviews, and Duck games. For a schedule of UO video broadcasts, see <http://darkwing.uoregon.edu/~docsrn/iptv.html>

System Requirements:

To take advantage of Duckware 2000, you'll need:

- a PC running Windows 95/98/2000, or NT... or
- a Macintosh running System 8.1 or better

If you don't have a CD-ROM Drive...

Copies of the Network Applications Installer and the Norton Antiviral software from previous years are available from the Computing Center's Documents Room (175 Grayson). You may use the CD-ROM on UO computer lab machines as well. Most of the content can also be found on our UO-net public servers (e.g., "CC Public Domain" and "public") or on the web.

Where Can You Get It?

Students, faculty, and staff may pick up their copy of the Duckware

2000 CD at one of the following campus locations:

- **Microcomputer Support Center** (151 Grayson Hall)
- **CC-Grayson Lab** (Room 101 Grayson Hall)
- **CC-EMU Microcomputing Lab** (22 EMU)
- **CC-Klamath Lab** (B13 Klamath Hall)
- **CC-Millrace Lab** (113 Millrace I)
- **Knight Library Information Technology Center** (ITC)
- **Science Library Information Technology Center** (Onyx basement)

Students living in campus housing can get Duckware at Residence Hall and Family Housing area desks in the University Inn, Hamilton, Carson, Spencer View, and Westmoreland.

Reuse and Recycling

If you decide you no longer want your copy of Duckware 2000, please don't throw it away! We'll gladly take it back and give it to someone else. Just drop it off at the Microcomputer Support Center, or mail it via campus mail to "Microcomputer Services - 151 Grayson Hall."

Thanks to the UO Campus Recycling Program, you may also recycle the Duckware CD-ROM in designated bins at any of these locations:

- CC-EMU, CC-Klamath, CC-Grayson, or CC-Millrace Labs
- the Knight and Science Library ITCs

You can drop the white paper sleeve in any paper recycling bin on campus.

Questions?

For additional Duckware help or information, call or write the Microcomputer Support Center (346-4412; microhelp@oregon.uoregon.edu), visit them in Room 151 Grayson Hall weekdays from 9 am to 5:00 pm, or check out their web site at <http://micro.uoregon.edu/>

Understanding Email at the UO:

If you're bewildered by the array of available email products, this guide can help you make an informed decision

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There are many different ways you can read your email at the University of Oregon. Sometimes the number of options can be rather overwhelming, particularly if you're new to campus. This article is designed to help new UO students and new UO faculty and staff understand their email options.

▶ **Returning Students and Longtime Faculty/Staff**

If you're a returning student or a longtime faculty/staff member and you're happy with the way you're currently reading your email, we think that's great—there's no need for you to change. We know that personal preferences about email are strong and passionately held, and we don't believe we can (or should) try to force all users into a single one-size-fits-all-solution.

Email Security. Having said that, we *do* urge *all* UO users to become more security-conscious about the risks associated with certain email-related practices, and to minimize those risks where possible.

For example, because of the possibility of mail-borne viruses (such as the ILOVEYOU virus that struck Outlook and Outlook Express users at some sites in May 2000), be sure you're running current virus protection, and don't open unexpected attachments.

Another area where many UO users can improve their email security is in the area of "network sniffing," or the risk that someone may eavesdrop on your email or your username and password while you're checking your email. UO users now have a number of options for virtually eliminating that risk, ranging from the very simple (e.g., using a secure web-based email product, as described below) to somewhat more sophisticated techniques, such as using SSL-enhanced POP or SSL-enhanced IMAP to read your email.

▶ **New Students and New Faculty and Staff:**

Our recommendation for new students and new faculty/staff is to try our new web email product called "IMHO" (see article on page 11).

You can use IMHO to read your email wherever you happen to be using your favorite web browser, e.g., Netscape or Internet Explorer. IMHO uses your existing Darkwing or Gladstone account; it automatically uses SSL session encryption to prevent hacker/crackers from sniffing your email traffic; it works for both PC and Mac users; it does not require cookies, Java or Javascript; and it does not require you to install any additional software on your system just to read your email. To try IMHO, go to <http://email.uoregon.edu/> and select Darkwing or Gladstone, as appropriate for your account.

Email FAQs

On the following pages, we've answered some frequently-asked questions about email at the UO

Q: *My email account is on Oregon...can I use IMHO with that account, too?*

A: No. IMHO is only available for use in conjunction with the university's Unix hosts (Darkwing and Gladstone) at this time. Oregon users can continue to use the university's classic web email solution, WebMail (that's what will open if you choose "Oregon" from the <http://email.uoregon.edu/> page).

Q: *I'm On Darkwing (or Gladstone) and I currently use the "old" WebMail product... Do I HAVE to switch to the new IMHO web email product?*

A: No, the old/classic WebMail product will continue to be available for your use. In general, we think you'll prefer IMHO to the older product, but if you want to continue with the classic WebMail product, that's fine too.

What Are Your Best Options?

More Email FAQs...

To get to the classic WebMail product, either (1) as always, go directly to <https://webmail.uoregon.edu/>, or (2) go to <http://email.uoregon.edu/>, select Oregon, and then choose Darkwing or Gladstone (as appropriate) on the opening classic web mail screen.

Q: *Why doesn't the Computing Center continue to suggest Eudora?*

A: While Eudora has long been a campus favorite, at this time Qualcomm has elected to distribute three different versions of Eudora: Eudora Light, Eudora Pro (Sponsored Mode) and Eudora Pro (Paid Mode). Let's briefly consider those three different versions:

- 1. Eudora Light** is a free version of Eudora that offers reduced functionality vis-à-vis Eudora Pro. As it was released some time ago, it's unlikely to get further significant development by the vendor.
- 2. Eudora Pro (Sponsored Mode)** is a full version of Eudora, but includes integrated advertising (just as broadcast TV includes commercials).
- 3. Eudora Pro (Paid Mode)** is just like Eudora Pro (Sponsored Mode), but without integrated advertising. Unfortunately, you need to pay to use it.

We believe that neither Eudora Light nor Eudora Pro (Sponsored Mode) were a good fit for UO users, and unfortunately the cost of a site license for the Paid Mode product was prohibitive. There's also the fact that Eudora's a POP- (rather than IMAP-) based solution; this has some important support implications for users who work from more than one location.

We're also striving to ensure that all email solutions we recommend support either SSL or SSH encryption, and unfortunately, at the time we were preparing this year's Duckware CD-ROM, Eudora lacked support for that sort of encryption. However, we fully expect Eudora to add SSH or SSL encryption sometime in the future.

Having said all that, we don't mean to imply that people should stop using Eudora for their email if it works well for them.

Q: *Why aren't you recommending Outlook or Netscape Communicator as email solutions?*

A: We know that many UO users run Outlook or Netscape Communicator, often simply because it comes with the web browser they're using.

Unfortunately, the experience of some campus units with email-borne viruses and Outlook's perhaps too-tight integration with other desktop applications led us to avoid recommending Outlook as a general-purpose email client for the campus as a whole at this time.

We've also found that Outlook, Netscape Communicator, and other integrated mail clients don't work well in computer lab situations, where users need to customize Outlook with their email address and personal information and often forget to remove that personal data when they're done—leading to substantial confusion and ongoing support issues associated with mail sent by subsequent users of that machine.

As with Eudora, if you're using Outlook or Netscape Communicator and like it, that's fine. We're just not promoting it as a recommended campus solution. As always, we strongly urge Outlook and Outlook Express users to install a good virus protection product, and we strongly recommend that you also exercise good self-discipline when it comes to backing up all your work.

Q: *What about Pine and other command-line email clients?*

A: Pine (and other command line email clients) have traditionally worked very well for many users, and will continue to be an option. The biggest problems with Pine and other command-line email clients have been that printing messages doesn't work the way users expect it should; and, as a text-only application, command-line email clients have limitations when working with attachments.

Q: *What about Departmental-only email?*

A: Some departments have elected to run departmental email solutions such as Microsoft Exchange Server, Groupwise, etc.

If those departmental email solutions work well for those departments, that's fine. However, since our support staff do not have accounts on those departmental-only systems, and because there's a limit to the number of different email clients we can learn and maintain proficiency in, we can't directly support users of departmental email systems. Users of those systems should contact their departmental system administrators for assistance with any problems they may have.

Q: *What about free web-based email solutions such as Hotmail?*

A: You should use a UO account for your UO-related (academic and administrative) email. Here are some of the reasons why:

- **Loss of UO Identity:** When you send email from a free web-based email account, UO recipients of that email have no way of knowing that you're from the UO.

- *continued on page 10*

Email FAQs, continued...

Why you should use a UO account for your UO-related (academic and administrative) email, *continued...*

Because many of our services are limited to UO faculty, students and staff only, when you send email from a non-UO account you may be denied access to some services, or experience delays in getting service which would not occur if you were using a UO address.

- Overlooked Incoming Email on Your UO Account(s): If you use a non-UO account, you may end up missing email sent to your account of record (as listed in the UO online directory).

- Free Web-Based Email is Filtered By Some Users/Sites: Because many spammers routinely exploit free web-based email providers to send their spam, or forge the address of free web-based email providers into spam sent from elsewhere, many people routinely filter ALL email from free web-based email providers. Often this results in your messages from the free web-based email provider simply being silently discarded.

- Free Web Based Email Systems Are Favorite Targets For Spammers: Receipt of spam is a problem at many free web-based email sites, too. While we actively work to eliminate spam on Darkwing, Gladstone and Oregon, there's nothing we can do to help you eliminate problems you may have with receiving spam on a free web-based email account.

- Free Web Based Email Systems Do Not Generally Support Encryption: Most free web-based email solutions do not offer encryption of your email messages or your username and password, which can leave you vulnerable to hacker/crackers sniffing your traffic.

- POP Consolidation Routines Represent Security Vulnerabilities: Some free web-based email solutions permit you to consolidate email from multiple accounts (located elsewhere) on a single free web-based email account, typically using the POP3 (Post Office Protocol) to retrieve the mail from those other accounts. If you POP your UO email onto a free web-based email account, the free web-based email site will typically store your UO account information and password on a server at their site—a very insecure practice.

- Hidden costs: “free” web-based email solutions such as Hotmail are actually supported by advertising and have various hidden costs. For example, the university ends up having to engineer additional network capacity to accommodate the load associated with those “free” services.

Email received on Darkwing, Gladstone, or Oregon is far more efficient and cost-effective.

In conclusion, we urge you to use the UO accounts that are made available to you for your UO administrative and academic business.

Q: What about campus “portals” - will UO install a campus portal with integrated email?

A: While the Computing Center continues to actively evaluate various campus portal solutions, we will not be installing a campus portal which uses integrated email at this time.

Email-Related URLs:

- To access UO's web based email
<http://email.uoregon.edu/>

- Microcomputer Services (for general help with supported desktop email clients)
<http://micro.uoregon.edu/>

Your email and viruses....

- Anti-virus software (You can get this on the Fall 2000 Duckware CD-ROM, which is available from the Microcomputer Support Center in 151 Grayson Hall)

- Information on the ILOVEYOU virus in particular
<http://www.symantec.com/avcenter/venc/data/vbs.loveletter.a.html>

- “Stay Virus Free! Don't Open Unknown Email Attachments!”
<http://cc.uoregon.edu/cnews/summer2000/iloveu.html>

Your email and security....

- SSL Encryption Lets You View Your Email Securely on Darkwing or Gladstone
<http://cc.uoregon.edu/cnews/spring2000/ssl.html>

IMHO...

- IMHO's home page in Sweden
<http://www.lysator.liu.se/~stewa/IMHO/>

fading memory?



upgrade at the

E-SHOP

uo computing center electronics shop

•computer repairs •upgrades •custom systems

346-3548

151 Grayson Hall Annex
hardwarehelp@oregon.uoregon.edu
http://cc.uoregon.edu/e_shop.html

Computing Center Offers Palm and WindowsCE Networking Support

Joel Jaeggli

joelja@darkwing.uoregon.edu

Very soon, you'll be able to use your PDA to access UO resources via the Internet.

Spurred by the growing popularity of these mobile handheld devices, the Computing Center is beginning to support network access from Palm and WindowsCE-based PDAs ("Portable Digital Assistants").

Long known for its diverse "organizer" capabilities, the Palm Computing platform developed by 3com and implemented in Palmtop computers from 3com, IBM, Handspring and others is now spawning an increasing number of communications products—including modems, packet radio, and cellular communications. This trend makes Palmtops more useful for messaging, web browsing, and stand-alone computing tasks.

For a description of the tools you'll need to connect to the Internet using a Palm device (with emphasis on accessing resources at the UO), see <http://darkwing.uoregon.edu/~joelja/project/palm>

If you have further questions about Palm or WindowsCE networking, email consult@gladstone.uoregon.edu.

Watch for a discussion of various wireless access technologies for handheld computers in a future issue of *Computing News*.

UO FALL 2000 COMPUTING SURVEY

Welcome to the UO's Fall 2000 Computing Survey! This survey is intended to help us better understand how faculty, students and staff are using computing and networking, and also help us serve you better. To ensure we accurately record your responses, please PRINT legibly.

I. YOUR PERSONAL COMPUTER

1. Do you have a personal computer that you regularly use for your university-related work? What kind of a system is it? (If you have more than one system, please tell us about your primary/main system)

- I don't have a personal computer (or I only use a computer in a computer lab)
- Macintosh
- PC running Windows 95
- PC running Windows 98
- PC running Windows NT
- PC running Windows 2000
- PC running Linux
- Unix workstation (Sun, *BSD, etc.)
- Other (specify _____)

2. If you have a personal computer, who owns it?

- you
- The University of Oregon
- someone else (parent, roommate, friend, etc.)

3. On a scale of 1 to 5, considering that system as a whole, how happy are you with it? (1=very happy, 5=very UNhappy) _____

4. Who made your system? (Dell, Apple, Gateway, Micron, self-built, etc.): _____

5. If you could change one thing about your system to make it better meet your needs, what would that be?

6. Is the system you use connected to the network?

- Yes, it is directly connected to the campus network using a **network (ethernet) card**
- Yes, it is connected via a **dial in modem**
- Yes, it is connected via a **wireless modem**
- Yes, it is connected via a **cable modem**
- Yes, it is connected via **DSL** (specify ISP used for your DSL connection _____)
- Yes, it is connected via **some other means** (specify _____)
- No, my system **isn't connected** to the network

7. Thinking just about your system's connection to the network, how well is that working for you? (1=working very well, 5=working very badly) _____

8. Do you use some sort of virus protection software on your personal computer?

- Yes, Symantec's Norton Antivirus
- Other (specify: _____)
- No (if no, please tell us why you don't use an antivirus product: _____)

9. What World Wide Web browser do you normally use?

- Netscape
- Microsoft Internet Explorer
- Other (specify: _____)
- I don't use a World Wide Web browser

10. What word processing program do you usually use to create documents such as papers, reports or memos?

- Microsoft Word
- Other (specify: _____)
- I don't use a word processing program

11. Do you use a spreadsheet program? If so, which?

- Microsoft Excel
- Other (specify: _____)
- I don't use a spreadsheet program

12. What other non-network personal computer software do you regularly use, either on your own system or on a system in a computer lab? (check all that apply)

- Access (the Microsoft Office database product)
- Acrobat
- Autocad
- Director
- Dreamweaver
- Fireworks
- Flash
- FrameMaker
- FreeHand
- FrontPage
- Illustrator
- Mathematica
- Matlab
- Minitab
- Norton Utilities
- PageMaker
- Photoshop
- Powerpoint
- programming languages or programming tools (specify: _____)
- Quark
- SPSS (on personal computers, not large systems)
- Visio
- WordPerfect

(continued on page 12)

UO FALL 2000 COMPUTING SURVEY

II. YOUR EMAIL

13. Some UO users have multiple email accounts or email addresses. How many email addresses do you have? (include work & personal accounts) _____

14. Where are those accounts? (check all that apply)

- _____ Darkwing
- _____ Gladstone
- _____ The VAXcluster (Oregon/Donald/Daisy)
- _____ A departmental email system (if so, please specify which one: _____)
- _____ A free email service such as Hotmail, etc. (if so, please specify which one: _____)
- _____ A commercial Internet Service Provider's email system, such as AOL, etc. (if so, please specify which one: _____)
- _____ Other (specify _____)

15. Which email account do you use for UO business? (specify: _____)

16. How do you normally read your email?

- _____ via a web email interface (such as WebMail)
- _____ via a command line email interface (such as Pine)
- _____ with Eudora (or some other POP client)
- _____ with Outlook (or some other IMAP client)
- _____ with a proprietary email program (such as Notes)
- _____ other (specify _____)

17. What's the one thing you'd most like to improve or change about your email? (specify: _____)

18. Please circle A to agree or D to disagree with each of the following statements. Circle N/A if the statement doesn't apply or you have no opinion.

- A N/A D I get sent attachments (MIME documents) which I have trouble reading/'decoding'
- A N/A D I frequently find myself running out of space for messages on my account
- A N/A D I often get sent irritating "spam" email
- A N/A D I can find email addresses I'm looking for
- A N/A D I wish I could send and receive extremely large documents via UO email

III. THE WORLD WIDE WEB

19. Does the University of Oregon's default home page (<http://www.uoregon.edu/>) work well for you?

_____ Yes _____ No

If it doesn't work well for your needs, what's the one most important thing we should change? (specify: _____)

20. Do you have your own web site (or web "home page")? (check all that apply)

- _____ Yes, I've got web pages on a UO web server
- _____ Yes, I've got web pages on a non-UO web server (If

you have pages that aren't on a UO web server, why?

_____ No, I don't have web pages of my own

21. You can search UO web pages using a locally-run Altavista search engine (e.g., <http://search.uoregon.edu/>) or with Google's UO-only search engine available at <http://www.google.com/uoregon/> Which do you prefer for doing UO-only web page searches?

- _____ <http://search.uoregon.edu/>
- _____ <http://www.google.com/uoregon/>
- _____ No preference/not applicable/don't know

22. A large fraction of UO's bandwidth usage is associated with users accessing Internet World Wide Web pages. For many users, use of a proxy server/web cache can accelerate the speed at which web pages get delivered, and simultaneously reduce UO's bandwidth requirements. Do you use the UO Squid proxy server/web cache? (proxy.uoregon.edu port 3128)?

- _____ Yes, I use the UO web proxy server
- _____ No, I don't use the UO web proxy server (If you don't use the UO's web proxy server, why not? _____)

IV. OTHER:

23. How satisfied are you with each of the following facilities/services (1=very satisfied, 5=very UNSatisfied, NA=not applicable or don't know):

- _____ UO Computing Center new dialin modem service
- _____ UO Computing Center large shared academic systems (Darkwing, Gladstone and Oregon)
- _____ UO's Internet connectivity
- _____ UO resources for **scientific/technical/statistical research computing**
- _____ UO resources for **instructional computing**
- _____ UO computing/network-related **web pages**
- _____ UO computing/network-related **printed materials**

24. Do you use a personal digital assistant, such as Palm Pilot? If so, what brand/model? _____. Do you have network connectivity for it? Yes_____ No_____

25. Do you use an Internet-capable, web-enabled cell phone, either provided by the UO or personally owned? If so, what brand? _____. Do you have network connectivity for it? Yes_____ No_____

26. Are you:

- _____ faculty member (dept: _____)
- _____ staff (dept: _____)
- _____ graduate student (dept: _____)
- _____ undergrad student (major: _____)
- _____ other (specify: _____)

Thank you! Please return this completed survey to:
Fall Survey, Computing Center, UO, Eugene, OR 97403
Attach a sheet with any additional comments you may have.
Questions? Contact joe@oregon.uoregon.edu

DETACH ALONG THIS LINE AND MAIL TO UO COMPUTING CENTER

Traveling? Plan Ahead for Internet Access

Joel Jaeggli

Network Application Specialist

joelja@darkwing.uoregon.edu

Immediately after the summer break is probably not the ideal time to talk about traveling, but I'd like to share some observations about accessing the Internet while traveling in the US and abroad.

In most cases, careful planning is required. You may be very disappointed if you just throw your laptop on the plane and expect it to work at the other end.

Step One: Arrange Connectivity Beforehand

While virtually every country in the world now has some form of Internet connectivity, it varies widely in scope, quality, and expense—from mail-only UUCP dialup connections in some places in Africa and the Pacific Islands, to low bit-rate simplex or duplex satellite connections, to multi-megabit connectivity rivaling anything in the US. Arranging for connectivity beforehand, whether through a university if you are visiting one, or through a commercial Internet service provider if you are not, is a good precaution.

Choosing an ISP. In the United States (and to some extent, Canada) this is largely a question of choosing any one of the large nationwide ISPs (Internet Service Providers), such as AOL, AT&T WorldNet, IBM Global Networking, and so on. Signup can typically be done directly from the ISP's web page, and costs are generally on the order of \$20 a month or less.

To find a local ISP outside the US, you might start by looking at Yahoo's ISP list at

http://dir.yahoo.com/Business_and_Economy/Business_to_Business/Communications_and_Networking/Internet_and_World_Wide_Web/Network_Service_Providers/Internet_Service_Providers_ISPs/_By_Region/

or

The List's ISP Buyers Guide at <http://thelist.Internet.com/>

or

Boardwatch Magazine's Directory of ISPs at <http://www.boardwatch.com/isp/ac/index.html>

Ethernet connections. If you have access to a network connection on a university campus or in a business setting, significantly faster network connections may be available to you. Bring an Ethernet card and be prepared to make significant changes to your network settings in order to make it work. In some locations (such as at the UO) DHCP service is provided and connecting to the network is only a question of plugging in your Ethernet card. Elsewhere, static-IP addresses are assigned; in that case, you must get one assigned to you and configure your laptop accordingly.

Once you have a network connection, whether through a dialup provider or over Ethernet, you can use network applications just as you would on the UO campus or modem pool...with a few caveats. Some of these exceptions are described below.

Email: The UO email servers on Oregon, Gladstone, and Darkwing will accept POP or IMAP connections from anywhere on earth. They will not, however, relay SMTP mail for you. The practical consequence of this is that mail sent to UO addresses will be delivered, but mail sent through the UO to other addresses will not be delivered. The solution to this is to set your email client to use an SMTP mail server at your current location (i.e., wherever you may be when traveling). The local server will then relay mail to the UO and to other locations on your behalf.

World Wide Web: Frequently, service providers outside the US insist that you use a proxy server. Their proxy may function in one of two ways. One method requires no configuration on your part, and the other requires you to reconfigure your web browser, as described below:

1. Transparent proxy: a transparent proxy automatically relays requests made on port 80 (the http port) to a proxy server. This requires no configuration on your part, but it may cause connections to certain web sites to break in unexpected ways, and there is little you can do to overcome this.

2. Blocking the http port: a provider might also choose to block port 80 on their routers and require that users configure their web browsers to point at a specific web proxy.

In either case, if your web browser was previously configured to use the UO proxy server, or was automatically configured to do so (Internet Explorer 5 or later) you may have to change the proxy setting in order to make it work in a different environment.

Streaming Media Applications: These may require additional configuration to pass through a proxy, or be blocked entirely in the interest of conserving bandwidth.

Step Two: Be Flexible

Finally, expect to be flexible. It is difficult for consultants at the UO to troubleshoot problems associated with attempting to connect to the network from distant university campuses. If your machine doesn't work on a distant network, or your mail client fails to work for some reason, you can always access email on our primary systems (Oregon, Darkwing Gladstone) by going to <http://email.uoregon.edu> from any Internet-connected web browser.

Asking questions before you leave is generally best. If you're planning to travel and would like connectivity advice, feel free to email your questions to microhelp@oregon.uoregon.edu and consult@gladstone.uoregon.edu

Your Computing Account: What Large

Your UO computing account gives you access to one or more large timesharing systems. To help you choose the system that best suits your needs, we've described each of them in some detail below.

Faculty/Staff

Faculty and staff are eligible for accounts on either **Darkwing** or **Oregon**, or both.

Darkwing. Darkwing is a large shared Sun Unix system running Solaris 2.7 (Sun's version of Unix). Darkwing is used for email, web browsing and publishing, and scientific/numeric applications. Accounts on Darkwing will also work on the Alphacluster (see "Other Systems," below).

Oregon. Oregon is a large Compaq system running OpenVMS/AXP. OpenVMS/AXP is a unique operating system that is *not* based on Unix; its commands are actually most reminiscent of MS DOS. It is the same operating system used on the university's administrative computer systems.

For most faculty and staff, either Darkwing or Oregon will work fine for routine email purposes and for serving typical web pages. Beyond that, system choice is primarily a matter of personal preference, as long as the software you want to use is installed on the system you pick (see the software chart on the following page).

If you do establish accounts for yourself on both Darkwing and Oregon, please be sure to routinely check your email on *both* systems, or forward your email from your less preferred account to your favorite account. Passwords and files are not shared between Darkwing and Oregon.

Undergraduate Students

Undergraduate student accounts are automatically created on **Gladstone**. Gladstone is a large Sun Solaris system and, like Darkwing, it runs Solaris 2.7, Sun's version of Unix.

Gladstone accounts can be used for electronic mail and serving personal

web pages. This year we also offer an expanded range of academic software on Gladstone, such as *SAS* and *Mathematica*.

Undergraduate students can also authorize themselves for an Oregon account if they prefer OpenVMS over Unix, or if they simply want a second account to use as a backup.

Graduate Students

Graduate students automatically have accounts created for them on Darkwing; however, if they wish, they can also authorize themselves for accounts on Gladstone and Oregon.

Other Systems

You may also see these other systems mentioned from time to time:

Donald and Daisy. Donald and Daisy are large Compaq administrative systems running OpenVMS/AXP. The primary application running on these systems is BANNER, an administrative application environment based on Oracle, a popular large system database.

Donald and Daisy share disk, printers and some other resources with Oregon, but access to Donald and Daisy is restricted to staff members who are performing administrative tasks like grade processing and payroll.

Alpha. Alpha is the name for a cluster of five Compaq 500 workstations that run Compaq Tru64 Unix (formerly DEC Unix). Individual members of the Alphacluster have water-related names, such as *hotspring*, *thunderstorm*, *river*, *downpour*, and *geyser*.

User directories on Darkwing are exported to the Alpha systems, so you'll see all your files from Darkwing on the Alpha workstations automatically, and any changes you make on either

Darkwing or Alpha will automatically be reflected on the other system.

However, because Darkwing runs a different version of Unix than Alpha, (Solaris vs. Tru64 Unix), you cannot compile your program on one system and then run it on the other (i.e., if you want to run your FORTRAN program on Darkwing, compile it on Darkwing and run it on Darkwing).

No mail or web service is provided on the Alphacluster.

Dolly: Dolly is an experimental Beowulf cluster, one of two in the Oregon University System. It consists of eight dual Pentium II nodes connected via a private fast ethernet network to a node controller, and runs the PVM and MPI message passing libraries on top of Redhat Linux.

If you are a faculty member or graduate student interested in gaining access to Dolly to run PVM or MPI codes, please contact Hans Kuhn (hak@darkwing.uoregon.edu) for more information.

What About NT or Novell?

The Computing Center does not currently provide public accounts on any NT- or Novell-based system.

What About Dialin Access?

Your account on Oregon, Darkwing or Gladstone enables you to dial in from off campus to the university's modem pool (see related stories on pp. 2-3).

Your modem access is for casual use—no more than a few hours a day on average. If you need dedicated or near-dedicated network access, however, you will want to contact a commercial Internet Service Provider (ISP). One list of ISPs is available at <http://www.thelist.com/>

Timesharing Systems Are Available?

What About Class/Departmental Accounts?

If you're teaching an undergraduate class and your students need to access software available only on Darkwing, temporary accounts (so-called "ST" student accounts) can be created for their use. For more information, instructors should contact Connie French, the Computing Center accounts clerk, at 346-1738.

If you're a department or university-recognized institute, lab, or organization, you can arrange for a departmental

account. Such accounts are offered solely to provide an authoritative and unchanging home for departmental web pages and official departmental email, and must be officially requested by the person responsible for the account.

Finally, please note that *all* use of university computing resources is subject to the university's Acceptable Use Policy, which is available in printed format from the Computing Center Documents Room (175 Grayson Hall), or online at

http://cc.uoregon.edu/docs/acceptable_use.html

Software on Oregon, Darkwing, and Alpha

| Type of Software | OREGON | DARKWING | ALPHA |
|---------------------|--|---|--|
| Statistics Packages | SAS SPSS SCA (<i>inaccessible after 10/2/2000</i>) PRELIS/LISREL SHAZAM LINDO SLAM | sas* lindo bmdp spss Splus rats/estima eqs minitab <i>*also available on gladstone</i> | |
| Text Editors | EVE VI MicroEMACS TeX and L ^A T _E X | pico vi emacs and xemacs TEX and L ^A T _E X eve | pico vi emacs and xemacs |
| Network Software | FTP (remote file transfer) TELNET (remote login) PINE (email) LYNX (web browser) TIN (USENET News) | ftp (remote file transfer) telnet (remote login) lynx (web browser) pine (email) trn,tin,nn (USENET News) ssh (secure login) pgp (encryption) | ftp (remote file transfer) telnet (remote login) lynx (web browser) ssh (secure login) pgp (encryption) |
| X-Window Only | NETSCAPE (web browser) | netscape (web browser) xv (Image manipulation) staroffice (Office Suite) acroread (Acrobat Reader) | netscape (web browser) xv (Image manipulation) acroread (Acrobat Reader) |
| Programming | C FORTRAN (77 & 99) PASCAL IMSL Math/Stat Libraries | cc and gcc c++ and g++ f77 (FORTRAN) pc (Pascal) IMSL Math/Stat Libraries NCAR fortran graphic libs Java developer's kit tcl/tk | cc and gcc c++ and g++ f77 and f90 (FORTRAN) pc (Pascal) IMSL Math/Stat Libraries NCAR fortran graphic libs Java developer's kit tcl/tk |
| Mathematics | | mathematica* magma matlab maple <i>*also available on gladstone</i> | |
| Miscellaneous | | RealAudio server (also available on gladstone) distiller (Adobe Acrobat) | rasmol (3D molecules) radiance (3D rendering) clustalw (gene sequencing) |

Want to Watch Broadcast-quality Video Over the UO's Network? See:

- "Using IP/TV to Receive Audio and Video 'Multicasts' Over the Internet" (<http://cc.uoregon.edu/iptv/>)
- "Setting up Mbone tools for Windows95/NT, Macintosh, and Unix" (<http://darkwing.uoregon.edu/~joelja/project/mbone/mbone.html>)

Who's Who at the

Meet some of the people who work behind the scenes to facilitate your computing experience on campus

Joyce Winslow

jwins@oregon.uoregon.edu



Randall Klein

Analyst Programmer, Administrative Services

Becoming a computer programmer was the last thing on Randall Klein's mind when he left Manhattan in 1986 and headed west.

Raised in a family of actors, Randall gravitated to music and the performing arts early in life. He majored first in jazz, then musical composition, while attending the University of Bridgeport in Connecticut, and after college he did a stint as a street musician in New York City.

But Randall has a practical streak, and he realized early on that the life of "starving artist" was not for him. He had fond memories of Oregon dating back to a camping trip in the Three Sisters Wilderness Area when he was in his teens, so he decided to head west and try his hand at cabinetmaking—a trade he assumed would be both creative and profitable.

After a brief disillusioning turn in a local woodshop, Randall turned to computer programming on the advice of a friend. To his surprise, he found that writing computer programs could be quite creative, and he also enjoyed the logical, problem-solving aspects of the profession. He learned his new trade at Lane Community College, and a program he wrote while doing a student internship at Lane County Regional Information Systems is being used there to this day.

After LCC, Randall worked for ten years as a client/server

programmer in the Eugene area. For the five years preceding his arrival at the Computing Center last May, he was writing database programs for Versalogic, a manufacturer of industrial computers. Here, Randall works primarily with BANNER software, maintaining and monitoring UO Human Resources databases and administrating NT and Novell servers to keep everything running smoothly.

Randall met his wife Kimberly in a ballroom dance class, and they married in June 1999. Kimberly is currently enrolled in the nursing program at LCC. Despite their busy schedules, they still find time to dance. Randall is also a rock climbing and chess enthusiast, and keeps up with his guitar.



Georgia Scott

Assistant Director for Business Services

Marrying her high school sweetheart seemed to guarantee that Georgia Scott would stay in her hometown of Cordova, Tennessee, a small rural community outside of Memphis, and raise a family there. Instead, marriage and family ties drew her to Corvallis, where for several years she and husband Rickey juggled jobs and cared for their three children while completing advanced degrees.

Georgia admits the Northwest was pure culture shock at first, but now she and her family are very much at home here. Rickey is the minister at Riviera Baptist Church in Eugene, while Georgia, who is musically inclined and once flirted briefly with the idea of being a music major while an undergraduate at Memphis State, plays keyboard at church services and is choir director for both the adult and children's choirs.

Before joining the Computing Center staff in July, Georgia worked as an accountant in the UO Geology and Physics departments for several years. At the Computing Center she's responsible for managing the budget, contracts, and numerous grant-funded projects. She is currently working

Computing Center

on a grant for using high-speed networking in education, a project involving the Computing Center and seven other UO departments.

An outdoor enthusiast, Georgia enjoys the many hiking opportunities in the Eugene area. Each year, she and her large extended family—her dad, four brothers and sisters, six nephews and nieces, three grown children, and four grandchildren—gather for a traditional hike in the Cascades.



David Crowe
Director, NERO Network Engineering

David Crowe was lucky enough to find his niche early in life.

David was born in Salem, but spent much of his childhood on the island of Kodiak, Alaska. The Alaskans' famous independence and self-reliance was not lost on David, who worked on commercial fishing boats between school terms from the time he was a sophomore in high school, and he financed much of his college education by hard work on the high seas.

In 1982, David returned to Oregon to attend OSU, where he completed a B.S. in Civil Engineering and began working

on a master's. While doing research for his advanced degree, he became increasingly interested in network engineering and designed and installed the network for OSU's College of Engineering. This achievement gave rise to a job in the Chancellor's Office, where David worked to connect all of Oregon's higher education institutions via network.

For the past four years, David has been the network engineer for NERO, the Network for Education and Research in Oregon. NERO's mission is the development of high speed wide-area network connectivity to further education and research in Oregon, and the organization provides network service for the Oregon University System, the State Department of Administrative Services, and the Oregon Public Education Network via the Oregon Wide-Area Network (OWEN).

OWEN/NERO now operates out of the UO, and on July 1, David moved his main office to the Computing Center, where he will soon be joined by another OWEN/NERO engineer. The move means a longer commute to work from his home in Corvallis, where he lives with his two cats Momcat and Charcoal, but David is no stranger to commuting. His network consulting and troubleshooting duties necessitate frequent travel, so he also maintains offices in Portland, at home, and at OSU.

Current pressing OWEN/NERO projects include a major upgrade of most router installations, an upgrade of the network's backbone and ISP circuits to meet traffic demands, and installing new circuits to increase the network capacity of Western Oregon University and Southern Oregon University. In addition, he is working to complete the connection of a new high-speed circuit between OWEN/NERO and Washington's K-12 network.

When not immersing himself in network issues, David takes to the trails around Corvallis on his mountain bike. He is also an avid downhill skier and heads for Mt. Hood or Mt. Bachelor whenever he can. Another consuming hobby is woodworking. A few examples of David's finely crafted furniture and cabinets grace his home, and even more are given as gifts to lucky members of his family and friends.

UO Obtains Site License for GIS Software

Hans Kuhn
hak@darkwing.uoregon.edu

The College of Arts and Science, Allied Arts and Architecture, Office of Research, and the Ed Tech committee have funded a campus site license for ESRI software. ESRI's products include the popular ArcView and ArcInfo software packages for Geographic Information Systems (GIS).

Users can install the software on their office or home computers. The software will also be available in campus computer labs for those who don't have their own computer.

More information on installing and using this software is available at <http://esri.uoregon.edu>

FALL WORKSHOPS

The Library and Computing Center are committed to making sure you have opportunities to build your technology skills. Toward that end, we provide a full range of computer and Internet training, from novice to advanced skill levels. These information technology ("IT") workshops are free and open to currently enrolled students, as well as staff and faculty.

There is no registration; all seating is available on a first-come, first-served basis. You *must* meet the workshop prerequisites as stated in the description.

Requests for accommodations related to disability should be made to 346-1925 at least one week in advance of the workshop. For more information, contact the Office of Library Instruction (346-1817, cbell@darkwing.uoregon.edu, <http://libweb.uoregon.edu/instruct>).

Note: The skills taught in these workshops, whether taught in a Mac or Windows environment, are transferable across platforms.

| Workshop | Day/Date | Time | Location | Presenter |
|---|----------|------|----------|-----------|
| This schedule is subject to change. See http://libweb.uoregon.edu/it/ for course outlines/materials and the most current information. The Winter Workshop Schedule will be available December 1 | | | | |

Basic Computing and Software Skills ★ ✓ Prerequisites

EndNote and ProCite: What Are These, and Why Should I Use Them?

| | | | |
|------------|---------------|-----|-------------------|
| Tue Oct 24 | 3:30 - 4:50pm | RSR | Brownmiller, Lenn |
| Wed Oct 25 | 3:30 - 4:50pm | RSR | Brownmiller, Lenn |

Introduction to SAS and Statistical Analysis - ★ ✓ Prerequisites: Basic knowledge of Unix/VMS and an account on Oregon, Darkwing, or Gladstone

| | | | | |
|----------|------------|------------|----|------|
| Part I | Thu Oct 12 | 1 - 2:50pm | EC | High |
| Part II | Thu Oct 19 | 1 - 2:50pm | EC | High |
| Part III | Thu Oct 26 | 1 - 2:50pm | EC | High |

PowerPoint Basics

| | | | |
|-----------|------------|-----|---------|
| Wed Nov 1 | 2 - 3:50pm | ITC | Heerema |
|-----------|------------|-----|---------|

More PowerPoint (New!) - ✓ Prerequisites: PowerPoint Basics or equivalent knowledge and skills

| | | | |
|------------|------------|-----|---------|
| Wed Nov 15 | 2 - 3:50pm | ITC | Heerema |
|------------|------------|-----|---------|

Communication and Research Topics ★ ✓ Prerequisites

Managing a Majordomo List: Basics see <http://darkwing.uoregon.edu/~llynch/majordomo/>

| | | | |
|------------|------------|----|-------|
| Tue Oct 24 | 2 - 2:50pm | EC | Lynch |
|------------|------------|----|-------|

Managing a Majordomo List: Advanced (New!) - ★ ✓ Prerequisite: ownership of an existing Majordomo list and an account on Darkwing. Includes troubleshooting problems, customizing headers and footers, creating a digest for your list, filtering unwanted attachments, and special request topics proposed by current list owners. **Please send topic requests to listmaster@lists.uoregon.edu no later than October 16.**

| | | | |
|------------|------------|----|-------|
| Tue Oct 24 | 3 - 3:50pm | EC | Lynch |
|------------|------------|----|-------|

Using MHonARc to Archive a Majordomo List - ★ ✓ Prerequisites: ownership of an existing Majordomo list and an account on Darkwing. Workshop materials: see <http://darkwing.uoregon.edu/~llynch/mdwks/> (username: **lists** password: **letmein**)

| | | | |
|------------|------------|----|-------|
| Tue Oct 24 | 4 - 4:50pm | EC | Lynch |
|------------|------------|----|-------|

Net a Job: Use the Web! ✓ Prerequisite: familiarity with a graphical web browser (e.g., Netscape, Internet Explorer) To register for this workshop, contact the Career Center 346-6001

| | | | |
|------------|------------|----|--------|
| Mon Nov 27 | 3 - 4:50pm | EC | Haynes |
|------------|------------|----|--------|

* WORKSHOP LOCATION CODES *

| | | |
|------------------------------------|---------|-------------------------|
| EC: Electronic Classroom (Windows) | 16 PCs | 144 Knight Library |
| ITC: Macintosh Classroom | 20 Macs | 267B Knight Library |
| RSR: Reed Seminar Room (Windows) | 7 PCs | 235 Knight Library |
| St A: Demonstration only | | Studio A Knight Library |

★ Requires an active account on Darkwing or Gladstone

FALL WORKSHOPS

| Workshop | Day/Date | Time | Location | Presenter |
|--|------------|---------------|----------|-----------------|
| Web Publishing ★✓ Prerequisites | | | | |
| Web Publishing I - ★✓ Prerequisites: Familiarity with a graphical web browser like Netscape or Internet Explorer and an account on Darkwing or Gladstone (not Oregon!); you must know your username and password | Mon Oct 9 | 2 - 3:50pm | EC | Frantz |
| | Thu Oct 19 | 10 - 11:50am | EC | Benedicto |
| Web Publishing II - ★✓ Prerequisites: Web Publishing I or equivalent knowledge and skills, and a web page you've created | Mon Oct 16 | 2 - 3:50pm | EC | Smith |
| | Thu Oct 26 | 10 - 11:50am | EC | Benedicto |
| Web Publishing III - ★ ✓ Prerequisites: Web Publishing II or equivalent knowledge and skills | Mon Oct 30 | 2 - 3:50pm | EC | Bell |
| Introduction to Dreamweaver (New!) - ✓ Prerequisites: Web Publishing I and II or equivalent knowledge and skills) | Tue Oct 31 | 10 - 11:50am | RSR | Johnson |
| Forms and CGI Scripts - http://darkwing.uoregon.edu/~jqj/inter-pub/forms/ ★✓ Prerequisites: Intro to Dreamweaver or equivalent knowledge and skills; an account on Gladstone or Darkwing; some knowledge of computer programming and Unix desirable | Tue Nov 7 | 10 - 11:50am | RSR | Johnson |
| Web Design Principles and Practices - http://darkwing.uoregon.edu/~cbell/design/ ★✓ Prerequisites: Web Publishing II or equivalent knowledge and skills) | Tue Nov 14 | 10 - 11:50am | RSR | Bell |
| Cascading Style Sheets - http://darkwing.uoregon.edu/~jqj/inter-pub/css/ ✓ Prerequisites: Intro to Dreamweaver, or equivalent knowledge and skills | Tue Nov 21 | 10 - 11:50am | RSR | Johnson |
| Digital Media | | | | |
| Shooting Great Digital Images (New!) | Wed Oct 18 | 2 - 3:50pm | St A | Kirkpatrick |
| Introduction to Photoshop (New!) - ✓ Prerequisite: Shooting Great Digital Images recommended | Thu Oct 26 | 1:30 - 2:50pm | ITC | Kim |
| Introduction to Flash (New!) | Thu Nov 9 | 1:30 - 2:50pm | ITC | Kim |
| Introduction to Digital Video (New!) http://www.apple.com/education/dv/ - ✓ Prerequisite: Shooting Great Digital Images recommended | Wed Nov 8 | 2 - 3:50pm | ITC | Heerema, Howell |

Workshops Available on Video

Looking for an alternative to the workshop format? The Computing Center Documents Room (175 Grayson Hall) has a growing collection of videos on using computers and computer software. You can use your UO picture ID to check out these videos. For a list of available titles and descriptions, visit <http://darkwing.uoregon.edu/~docsrn/video.html> Call 346-4406 for more information.

FITT Center Training for Faculty

If you'd like to learn how to design course websites, improve classroom presentations, use multimedia tools, plus many other ways to effectively integrate technology into teaching, visit the FITT Center in Media Services Room 18 on the ground floor of the Knight Library.

The FITT Center staff offers personal consulting and training to any UO faculty member or GTF free of charge. You can use their multimedia workstations, software, and various digital cameras, scanners, recorders and printers. Just drop in during scheduled hours or you may also request a reservation for any time (including weekends) and they will try to arrange it.

For more information about their services, facilities and hours, call 346-1942 or visit <http://libweb.uoregon.edu/fittc/>

Designing Web Pages For Everyone

Ironically, while the web has greatly broadened our audience, the way our pages are designed may needlessly exclude people

James Bailey

*UO Adaptive Technology Adviser
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The web makes university information available all over the world. UO web sites disseminate information ranging from the schedule of classes to class syllabi to student publications, and a person in Boston can browse our catalog with the same ease as a person in Eugene. Likewise, our distance education efforts use the web to offer classes to students from around the state and around the world.

Ironically, while the web has greatly broadened our audience, the way our pages are designed may needlessly exclude people. A poorly designed page may prohibit access to people with disabilities and the adaptive technology they use.

Most of the examples just mentioned—the catalog, the schedule of classes, etc.—are official university documents, and as such must be made accessible to people with disabilities. With traditional print, accessibility usually means converting to braille, audiotape, or large print. The web offers publishers the possibility of creating documents that are universally accessible. No alternative format or conversions are needed.

The only flaw in this otherwise promising picture is that web pages must be created to be accessible, and some designers aren't bothering to do so. While this may be acceptable in private commercial web sites (and that is starting to change), the university operates un-

der stricter legal requirements than does the private sector. As an institution of higher education, we have a legal obligation to provide our documents, including web pages, in an accessible format.

Offering an accessible site, serving all of our students, and meeting our legal obligations are just matter of following accessible design protocols when creating our web pages. There was time when such protocols were scarce, but now there is much information available to web designers about accessible design.

Tips for Creating a More Accessible Web Site

If you are designing a university web site, you should familiarize yourself with the accessible design issues and implement them from the beginning.

...the university operates under stricter legal requirements than does the private sector

"Accessibility validators." Be cautious of the various "accessibility validators." Bobby, a popular validator, is good as far as it goes, but there are aspects of the page that it completely ignores. Being "Bobby Approved" is a good start, but it does not ensure accessibility.

Creating online educational delivery sites. When using tools such as Blackboard to create an online educational delivery site, be sure the resulting site

meets accessibility standards. Some tools completely ignore this aspect of academic web design and can leave you with an unusable site. Rather than just reading specifications, test how the site builder integrates accessible design issues.

Hiring a web designer. If you are hiring a web designer, be sure he or she is fully aware of accessible design protocols. The issue of accessible web design has now been around long enough that most professional web designers should be able to implement it on your site.

Legal Issues

On a much larger scale, if you are contracting with an outside "partner" to create a university web site, then it is absolutely essential that your contract specify that the provider will be responsible for accessible design issues.

The fact that you bought an inaccessible product and the provider will not let you alter the original code does not mitigate your legal obligation to provide accessibility. You could end up with an expensive site you can't use.

Access to educational material is federally regulated, and the university may be held liable in cases where students have been denied access to web information on the basis of a disability. At the UO, students who have encountered inaccessible local sites have informed Disability Services, and those sites were quickly redesigned to be accessible.

Designing our web sites to include all web users just makes sense. With planning and knowledge of the issues, creating accessible web pages is really straightforward.

Editor's Note: James Bailey is the university's Adaptive Technology Adviser and assists with questions of accessible web design. You may contact him by calling 346-1076 or writing jbailey@darkwing.uoregon.edu

For a list of resources for this article, as well as a list of accessible design sites, see <http://adaptive-tech.uoregon.edu/article.html>



DSL Offers Faster Internet Access to Off-Campus Users

With DSL, you can talk on the phone and simultaneously connect to the Internet at high speed

If you take your work home, share large files, work on bandwidth-intensive files and research, or are simply a power Internet user, you may be looking for an option to slow dial-up connections.

If so, you might want to consider DSL (Digital Subscriber Line). With a DSL connection from a telecommunications company, you can get anything online up to 900% faster than with a standard modem.

What is DSL?

DSL transports voice and data over the network on the same line, from your house to your telecommunications company. At that time, the company's equipment in the network will split the voice and data components of each call; the voice is transmitted over the public switched telephone network and the data is transferred to a high-speed fiber optic network. This allows you to talk on the phone and use the Internet at the same time.

Find out if your telephone line qualifies for DSL

Qwest, formerly known as US WEST, is currently the primary DSL provider in the Willamette Valley, and its MegaBit Services (DSL) are available in many (but not all) Oregon Service Offices. Availability depends on your distance from the Service Office and technical phone line qualifications. (To see if your line qualifies, call 1-877-236-8169).

UO Custom Ordering: If you're affiliated with the UO and wish to order DSL service from Qwest, please place your order from the University of Oregon DSL custom ordering page at <http://megawot.uswest.com/uor/>

For a current list of megabit-qualified Internet Service Providers in Oregon, see

<http://www.uswest.com/products/data/dsl/isplist.html#oregon>

| How Does MegaBit DSL Compare to Your Dial-up Internet Service at Home? | | | | |
|---|--|--|--|---|
| Feature | Dial-Up (UO) | Dial-Up (Commercial) | MegaBit Select | MegaBit Deluxe |
| Speed | 56 Kbps | 14.4 - 56Kbps | 256 Kbps (possibly up to 640 Kbps downstream / 272 Kbps upstream) | 256 Kbps (possibly up to 640 Kbps downstream / 272 Kbps upstream) |
| Telephone line impact while online | Not able to make and receive phone calls on the same phone line while online | Not able to make and receive phone calls on the same phone line while online | Able to make and receive phone calls or Faxes on the same phone line while online | Able to make and receive phone calls or Faxes on the same phone line while online |
| User session | 2 hrs/session no more than 14 hrs/week on average | Varies with provider | 2 hours Unlimited number of sessions/day 10 min. notification before session ends May reconnect after 5 min. off-line | Always-on capability 24 x 7 |
| Modem/system requirements | 56 Kbps (or slower) analog modem | 56 Kbps (or slower) analog modem | Requires a MegaBit DSL internal modem; desktop PC only | Requires a MegaBit DSL internal or external modem; desktop PC, laptop, Mac, other |
| Price | N/C | Varies with provider | \$19.95/mo. + phone line + Internet access provider costs | \$29.95/mo. + phone line + Internet access provider costs |

Windows 2000's Active Directory

The Computing Center is still continuing to monitor, test, and evaluate Active Directory

Joe St Sauver

joe@oregon.uoregon.edu

Because a number of users or departments have asked about the Computing Center's plans vis-à-vis Microsoft Windows 2000's Active Directory, we wanted to let everyone know that while we will continue to monitor, test, and evaluate Active Directory and other network directory solutions, we don't believe the time is ripe for an organization-wide roll-out of production Active Directory services.

Is Active Directory Just Another Online 'Phonebook?'

Active Directory is *not* just a simple online phonebook, although it does use LDAP as part of its underpinnings. If you want to learn more about the nuances, there are several online resources you may peruse:

1. Microsoft's "Active Directory Overview" -

<http://www.microsoft.com/windows2000/guide/server/features/dirlist.asp>

2. *PC Magazine* (UK)'s May 2000 "First Look Shoot-Out on Directory Services" (a more accessible and pragmatically focused discussion than Microsoft's) -

<http://www.zdnet.co.uk/pcmag/ne/shoot-out/2000/05/01.html>

3. The USA version of *PC Magazine* -

<http://www.zdnet.com/pcmag/stories/reviews/0,6755,2426097,00.html>

The latter describes directory services generically as "... nothing more than orderly ways of classifying and managing resources on a network, be they users, printers, servers or security parameters," and goes on to say that, "Directories become the points of reference for applications and user services. They help find a printer in a field office, locate a user and direct an e-mail, or verify that a user has access rights to a particular file. They also provide single sign-on, which gives a user access to the whole network from a single log-on."

Described that way, directory services sound fairly innocuous. In reality, however, directory services are quite profound. As Scott Berinato of *eWEEK* states, "As IT departments consider how Windows 2000 and its Active Directory will affect their operations, some are finding that they are not just picking a directory, they're espousing a network philosophy." (<http://www.zdnet.com/eweek/stories/general/0,11011,2433130,00.html>)

Berinato is correct. Directory services are potentially the very heart of an organization's networking, and need to be

deployed in a sound, scalable, and supportable fashion if they are deployed at all.

Why We're Not Rushing Into Deployment...

There are many reasons for not deploying Active Directory at this time, including:

1. Other solutions are available. Active Directory isn't the only available network directory solution. If we need and want network directory services, another product (such as Novell's NDS) might well be the preferred alternative.

2. Active Directory is currently very Microsoft-centric. As Active Directory matures, it will likely be ported to and supported on a wider range of platforms, but clean solutions for non-Microsoft products aren't there today. Availability of top-notch cross-platform solutions is a critical consideration in an open standards-based environment such as ours, where Microsoft's operating systems represent only one of several different systems in widespread use. To quote Microsoft (<http://www.microsoft.com/Windows2000/news/bulletins/novellpart3.asp>): "... Microsoft believes that a cross-platform directory is less important to customers who are looking for an enterprise identity management solution than is a directory solution that is fully interoperable with other directories and includes native LDAP support."

3. Bugs. Microsoft's Active Directory represents a great deal of new code. Like all new code, it will undoubtedly have bugs and security vulnerabilities. Several major problems have already been detected and fixed (see *Selected References* on page 25), but it's quite likely there will be other issues as well. Eventually these will be identified and eliminated, resulting in a more stable and secure product appropriate for mission-critical production networking environments.

4. Active Directory is tightly coupled with DNS (Domain Name Service), and requires support for RFC 2052 Service Resource Records/RFC 2136 Dynamic Update Protocol. Because DNS is such a core component of Internet access, any service which interacts with or changes the operation of the UO's DNS has potentially profound operational and security implications for the campus. Moreover, it's clear that Active Directory would work best in an environment where the enterprise's core DNS services are hosted on a Windows 2000 system, while in the UO's case, as with most universities, core DNS services are delivered using BIND under Unix.

5. There are dramatically different ways that Active Directory can be deployed, and selection of the correct method is partially a matter of reconciling organizational responsibilities and authorities. This is particularly tricky in a largely decentralized university environment. Oxford University has done an excellent job of outlining some of the possible options, although it's worth noting that Oxford, like the UO, is currently deferring deployment of Active Directory.

at the University of Oregon

6. Active Directory domains cannot be renamed nor moved, nor can you merge Active Directory domain trees. This means that there are effectively some irreversible decisions associated with deploying Active Directory. Implementation of irreversible decisions obviously merit very careful study and deliberate action.

7. **Some Microsoft Active Directory interoperability products require use of non-TCP/IP protocols.** For example, Microsoft's Gateway Services for NetWare and File and Print Services for Netware require IPX, although Microsoft says, "If NetWare 5 and the use of TCP/IP in NetWare-based networks garner more customer interest than has so far been the case, Microsoft will certainly consider TCP/IP support for its other NetWare interoperability tools and services." (<http://www.microsoft.com/Windows2000/news/bulletins/novellpart5.asp>) As a campus, we are beginning to work to reduce and eventually eliminate routing of non-TCP/IP protocols, so it would not be in our best interest to install a product that currently requires us to take steps in the opposite direction.

Summary

For all the reasons outlined above—and more—we're not rushing to deploy Active Directory.

This is not to say that the UO will never deploy Active Directory, nor do we mean to imply that it has no advantages, because clearly it does facilitate certain activities. It is simply that right now, for the UO, there's no compelling mission-critical requirement that we push ahead with Active Directory until its problems are resolved.

Selected References

Active Directory Overview (Microsoft)

<http://www.microsoft.com/windows2000/guide/server/features/dirlist.asp>

PC Magazine First Looks: SHOOT-OUT DIRECTORY SERVICES

<http://www.zdnet.co.uk/pcmag/ne/shoot-out/2000/05/01.html>

Active Directory forces IT into tough choices

<http://www.zdnet.com/eweek/stories/general/0,11011,2433130,00.html>

Novell NDS for NT Facts

http://www.shi.com/Global/Content/Vendors/Novell/nds/nds_facts.html

Microsoft's Perspective on Novell's Active Directory Claims (Five Parts)

<http://www.microsoft.com/windows2000/news/bulletins/novell.asp>

Windows 2000 Active Directory in the University of Oxford

<http://www.oucs.ox.ac.uk/micros/oss/win2k/background.html>

A flaw in Active Directory?

<http://www.nwfusion.com/archive/1999b/0816kearns.html>

Active Directory: For Now, Try to Live Without It

http://www.computerworld.com/cwi/story/frame/0,1213,NAV47-81_STO40718,00.html

Microsoft to patch Active Directory - February 25, 2000

<http://www.cnn.com/2000/TECH/computing/02/25/patch.active.idg/>

Bug knocks Active Directory for a loop

http://www.idgnet.com/crd_active_163777.html

Gartner Group's Windows 2000 Professional Migration Model

<http://www.microsoft.com/windows2000/news/bulletins/gartner.asp>

Exchange 2000: Active Directory Ties That Bind

<http://www1.zdnet.com/products/stories/reviews/0,4161,2347836,00.html>

Buying a PC? The Type of Memory It Uses Can Have a Big Effect On Memory Upgrade Prices!

If you're buying a PC, pay attention to the type of memory it uses, because some memory can be far more expensive than others.

For example, <http://www.pricewatch.com/> recently showed numerous sources offering 128MB PC100 SDRAM DIMMs for \$106 plus shipping. For comparison, 128MB RAMBUS

RDRAM memory was quoted at Pricewatch for \$248 plus shipping—over twice the price of SDRAM!

But what about performance?

If you are considering the more expensive memory because you believe it has crucial performance advantages, you may also want to see "Rambus Requiem—RDRAM Fails Bandwidth Tests" at

<http://www.tomshardware.com/mainboard/00q2/000529/index-26.html>

Respect Online Copyrights

Jon Miyake

Acceptable Use Policy Officer
miyake@darkwing.uoregon.edu

MP3's combination of compact file size and high sound quality makes it a popular format for the exchange of music and other multimedia online, but be careful! The recent judgment against MP3.com, in which the company lost a large civil suit for CD copyright infringement, underscores the importance of taking copyrights seriously in all media.

University of Oregon student, faculty, and staff need to be aware that MP3s are like any other media, and all copyright provisions still apply to that content. Trafficking in copyrighted material without express permission from the copyright holder is a violation of the University of Oregon Acceptable Use of Computing Resources and federal law, and may result in civil or criminal action or university sanctions.

Additional information on the UO's acceptable use policy (AUP) can be found at http://cc.uoregon.edu/docs/acceptable_use.html If you have questions concerning acceptable use, feel free to contact Jon Miyake. (miyake@darkwing.uoregon.edu, 346-1635)

UO Departments: Need Software?

Departments needing to purchase operating system or application software should know that discounted prices on many products are available from the Oregon Educational Technology Consortium (see <http://www.oetc.org/>).

Take a Close Look at Cellular Services Before You Sign Up

Offers for 'free, unlimited access to the wireless Internet' are often too good to be true

You may have noticed advertisements by some cellular services offering "free" and "unlimited" digital cellular access to the "wireless Internet."

Before signing up for such a plan, watch out! At least in some cases, the "free and unlimited wireless Internet access" actually consists only of access to a tiny set of "captive" web sites run by selected partners of the cell phone service.

With that type of plan, you won't be able to access all URLs of your choice

(such as the UO's home page, or even popular search engines such as Google or Yahoo), unless the cellular provider has preselected those sites for you or you agree to pay an additional monthly fee.

Obviously, if you can only go to a tiny set of preselected sites, that's hardly "unlimited" access. If you have to purchase premium service, that's hardly "free." And if you can only access a few dozen sites, that's hardly today's "Internet."

We believe this sort of offer is misleading and unacceptable, and strongly urge you to avoid any "wireless Internet" cellular provider that attempts to offer this sort of crippled "free" wireless Internet service plan. Don't let some cellular provider attempt to restrict your usage and dictate what sites you'll visit. You can and should make that decision for yourself.

Interested in Learning More about Majordomo Lists?

Check Out These Fall Term Workshops...

Majordomo list owners (and list owner wannabes), mark your calendars!

On **Tuesday, October 24**, UO listmaster Lucy Lynch will teach a series of three workshops covering everything you'll need to know to set up and manage a list.

The workshops all take place in the Electronic Classroom on the first floor of the Knight Library, and no preregistration is required (see **Fall Workshops schedule on page 20**).

While the workshops start with basic skills and move to advanced features like digests and web archives, students can drop in at any point in the afternoon.

Note that the advanced workshop includes an opportunity to work on special topics of interest to current list owners.

If you want to see a particular subject or feature covered in the workshop, send a request to

listmaster@lists.uoregon.edu
no later than October 16th.

INTERNET2 AND THE UNIVERSITY OF OREGON

What are Internet2 and the Oregon Gigapop—and how do they benefit UO users?

Joe St Sauver

joe@oregon.uoregon.edu

Internet2 (I2) is the United States' leading next-generation Internet for higher education and research. Over 170 Carnegie Research I and II universities connect to I2 via high speed DS3 (45Mbps), OC3 (155Mbps) or OC12 (622Mbps) circuits, and I2 also interconnects with a growing number of counterpart international networks (see <http://www.internet2.edu/>)

US sites connect to I2 via one of two physical networks: Abilene (which runs on top of Qwest facilities), or the legacy vBNS (which runs on top of MCI facilities). Sites can connect to Abilene or the vBNS directly, or they can share a circuit via an aggregation point known as a Gigapop.

The University of Oregon, Oregon State University, Eastern Oregon University, the Oregon Institute of Technology, Southern Oregon University, and Western Oregon University all connect via the Oregon Gigapop run by the UO, connecting from here to Abilene via an OC3 to Denver, Colorado, and an OC3 to Sacramento, California. (For more

information about the Oregon Gigapop, see <http://www.ogig.net/>)

Just this summer, PSU, OGI, and OHSU brought up the Portland Research and Educational Network (PREN), which has OC12 connectivity via the University of Washington's Gigapop in Seattle. (For more information about PREN, see <http://www.pren.net>)

Normally, all traffic between I2 sites automatically flows via I2. This means that if you're working from the UO network, you need not do anything special to request access to I2—you have already been "preapproved" to use it. Nor do you need to specify that your traffic use I2—we automatically route it onto I2 whenever feasible. Since I2 performs better and costs less (under one-tenth the cost of commercial Internet access), it simply makes sense to use it.

Note that while I2 will carry all traffic between Internet2 sites, it will *not* carry traffic between the UO and non-Internet2 sites such as AOL, MSN, Yahoo, or Google. Traffic the university exchanges with non-I2 sites must be handled by the university's commodity Internet connections. Thus Internet2 supplements, but does not supplant, the university's normal Internet connectivity.

If you'd like to learn more about Internet2 and the University of Oregon, you may wish to consult back

issues of *Computing News*, available online at <http://cc.uoregon.edu/cnews/backissues.html> You can also plan to attend the UO's Internet2 Days this fall (see details below).

▶ 'Internet2 Days' Workshops Coming in November

On November 13th and 14th, the University of Oregon is hosting an "Internet 2 Days" workshop that will include presentations by Internet2 staff members Paul Love and Heather Boyles, as well as demonstrations of applications that make use of the Oregon Gigapop's high-performance connections to the Abilene network.

The workshop will provide a forum for researchers throughout Oregon to explore the enhanced opportunities that come with I2 connectivity via the OGIG (Oregon Gigapop), PREN (Portland Research and Education Network), and OWEN/NERO (Oregon Wide-Area Network/Network for Education and Research in Oregon).

Topics will include international collaborations, research funding and the network, shared instrumentation, and getting high-speed connections to the end user.

If you're interested in attending, or if you'd like additional information, please contact Lucy Lynch (llynch@darkwing.uoregon.edu; 346-1774).

Still Using Telnet? Please Switch to SSH!

If you're still using Telnet to connect to Darkwing, Gladstone, Oregon, or other systems, you should know your username and password are at risk of being "sniffed" or "eavesdropped" upon.

SSH is a replacement for Telnet that encrypts your traffic between your desktop and the remote system you're using. You should begin using it instead of Telnet. This year's Duckware CD-ROM has SSH software for PCs and Macs. For more information about SSH, see <http://www.ssh.org/>

SAS V. 8 is Here! Latest Release Adds More



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It's taken a long time to get here, but Version 8.0 of SAS has recently been installed on Oregon, Darkwing, and Gladstone, replacing the long-used Version 6.12. (Version 7 was considered a beta test for Version 8 on many systems, hence the leap to Version 8). The time needed to test and refine new features accounts for the relatively long delay in its release.

Version 6.12 will continue to be available on Darkwing until 12/31/2000 as a courtesy to those of you who may need time to test and modify programs and data files. You can invoke version 6.12 by typing `sas6` at the `%` prompt.

Longtime SAS users will find most statements and procedures unchanged, and many programs written for 6.12 and earlier versions should still work with few or no modifications. However, as with any new version, many features have been added, including:

- new documentation
- a new way of naming variables
- new analysis procedures
- new options
- a striking new Output Delivery System (ODS) for viewing results

Version 8 Highlights

Details of some of Version 8's most notable changes are summarized below:

Documentation. The old "white" books (documentation for Version 6) took up most of a mid-sized bookcase, and individual manuals were heavy and laborious to use. SAS 8 documentation is online at <http://sas.uoregon.edu/> (accessible from UO only), and you can also obtain it on a CD-ROM. Either source can be added to your "Favorites" in a web browser for fast and easy reference. A master index is available for quick lookup. If you prefer, you

may also purchase printed "blue" manuals from the SAS Institute, or check them out at the Computing Center Documents Room Library (175 Grayson).

Variable names. SAS programs can now be written with variable names longer than the previous eight-character maximum—in fact, up to 32 characters can be used for both variable and data set names. It's still necessary to begin every name with a character or the underscore '_', and names cannot have spaces, hyphens, and a few other special characters. If you limit variable and data set names to contain a combination of letters, numbers, and

Version 8's Output Delivery System has the potential to revolutionize how SAS is used by opening new ways to conceptualize SAS programming

underscores only, you should have few problems (other than remembering how to spell long names!).

Note: Many variable names from data sets produced within SAS procedures have changed. If you have programs written for version 6.12 where procedures create datasets, you may need to edit the variable names before the programs will work with Version 8. One way to determine correct variable name spellings is to use PROC CONTENTS on all newly created data sets.

New Data Set Filename Extensions. Version 8 permanent data set filenames are now appended with a new eight-character extension. For example, the V8 filename extension for a data set created on either Darkwing, Gladstone, or Oregon is now `<filename>.sas7bdat`

Full-screen Interface Discontinued. The full-screen terminal interface to SAS is no longer available in SAS 8. If you want to work in a full-screen environment, you will need an X emulator. Contact Microcomputer Services (microhelp@oregon.uoregon.edu) for help in selecting an X emulator for your desktop computer.

New Output Delivery System. The most innovative feature of this new release is the Output Delivery System (ODS). The remainder of this article will briefly describe what it is; however, to use it effectively, you'll need to take the time to practice and explore its possibilities. Version 8's ODS has the potential to revolutionize how SAS is used by opening new ways to conceptualize SAS programming.

What Is the Output Delivery System?

Prior to Version 7, most output generated by SAS procedures (that is, an output listing printed to a *.lis file on Oregon or *.lst file on Darkwing) was designed for a line printer or for viewing with a text editor on a terminal screen.

This type of output often has limitations that prevent users from looking at their results efficiently. For example, many listings were printed in pre-designed formats that could not be modified, and looking for a few numbers often required skimming through pages and pages of information. Now that we have desktop document editors, web browsers, and publishing systems, users require more outputting versatility than Version 6, with its monospaced fonts, provided.

In addition, a few procedures in Version 6 did not produce output data sets or the data required for sequential analysis. If you wanted to use data from one procedure that could not be stored in an output data set as input to a subsequent procedure, you had to rely on PROC PRINTTO to write results to a text file, and then write a DATA step to retrieve these results

Options, New Output Delivery System

and use them. This cumbersome process has now been eliminated.

The Output Delivery System (ODS) has been designed to overcome the output limitations of previous SAS versions and to make it easy to apply new formatting options.

In a nutshell, ODS is revolutionary because it allows you to customize your output according to components of your analysis stored in modules called "objects." For example, when running a regression program, parameter estimates and associated significance tests are contained in one object, the ANOVA table is stored in another, and so forth.

ODS can also deliver output in a variety of formats, making the output easy to access. Two of ODS's most important features include:

- **Listing Choices.** Within the same program, ODS can send results to any combination of four destinations, including the usual monospaced listing (the default), a new SAS data set, a high-resolution printer (e.g., PostScript), and a file printed in Hypertext Markup Language (HTML). SAS intends to add more choices in future releases, but this is a great start compared with the single choice available in the past.

- **Customizing Output.** ODS provides tables that define the structure of the output from procedures and from the DATA step. You can customize the way your output is presented by modifying table definitions or by creating your own with PROC TEMPLATE.

The manuals or relevant pages from online documentation can tell you the object names that are created for any SAS procedure. Many objects require that specific options be included on the statements, or they won't be created.

Probably the simplest approach to determine what output objects are available for a given procedure is to

use the ODS TRACE statement as shown below:

```
options ls=78 ps=55 nocenter;
ods trace on / listing;
data mydat;
infile 'mydat.dat';
input group y;
proc univariate data=mydat;
  by group;
  var y;
  run;
ods trace off;
run;
```

The ODS TRACE statement writes the name, label, template, and path created by the procedure for all available objects and the specific output associated with each into the listing file. You can now select (or exclude) one or more of these individual output objects to send to the destination(s) of your choice.

For example, the listing file from the program above shows that five output objects were created: **Moments**, **BasicMeasures**, **TestsForLocation**, **Quantiles**, and **ExtremeObs**.

With these five output objects you can easily create the usual listing output, new SAS data sets, HTML output, or high-resolution printer output.

Using ODS statements. The following program shows how to print three of the five available modules to the listing file and how to create SAS data sets for two of the five modules:

```
* print the 3 selected objects only to
the listing;

ods listing select Moments BasicMeasures
Quantiles;

* create output datasets for 2 objects;

ods output BasicMeasures=basic_measures
ExtremeObs=extreme_obs;

proc univariate data=mydat;
  by group;
  var y;
  run;

proc contents data=basic_measures;
proc print data=basic_measures;
proc print data=extreme_obs;
run;
```

The first statement, **ODS LISTING SELECT <>**; selects 3 of the 5 modules from the PROC UNIVARIATE step to print to the listing file. The ODS OUTPUT statement places 2 of these 5 modules into separate SAS data sets (their names are given to the right of the =) that can be printed or manipulated with subsequent DATA steps or procedures.

Use PROC CONTENTS on each data set to determine variable names, labels, formats, and other information.

Don't forget that data analysis from any procedure should always be done by evaluating all relevant information available.

For example, extreme observations may greatly affect the summary statistics available with PROC UNIVARIATE. Information available from one object often requires the contents of another object for its proper interpretation.

One of the strengths of ODS is that it removes responsibility for formatting output from individual procedures and from the DATA step. A procedure or DATA step supplies the raw data and the name of the table definition that contains the formatting instructions. ODS can then format the output in a variety of ways.

There are many other statements that make the ODS a powerful new programming tool that are not presented here. The main objective of this article is to show you that traditional SAS output (listing) is only one kind of ODS output; it is no longer the only kind. Unless you specifically close the listing destination, SAS continues to automatically create a listing output in a predefined format.

sas 8.1 for Windows is here... *see page 30*

SAS Version 8.1 for Windows Now Available

UO faculty, staff, and students can register to install the new software at <http://sas.uoregon.edu>

This year, we've added a site license for SAS for Windows (PCs) to augment our continuing SAS site licenses for Solaris (Darkwing and Gladstone) and VMS (Oregon).

You'll find installation information for the Windows version at <http://sas.uoregon.edu>, but before you

can install it you must first register at the sas.uoregon.edu website and then check out the two CDs from the Computing Center Documents Room Library (175 Grayson).

Our site license is an annual lease because the SAS Institute doesn't sell its software outright; it only leases it. Only University of Oregon faculty, staff, and students may install SAS on their computers. This includes laptops and computers located off-campus. However, users are allowed to install SAS on their PCs both at work and at home.

To install PC SAS, follow the steps outlined below:

1. Go to <http://sas.uoregon.edu> and open the link "Get SAS 8 installation instructions." Complete the online SAS software request form.

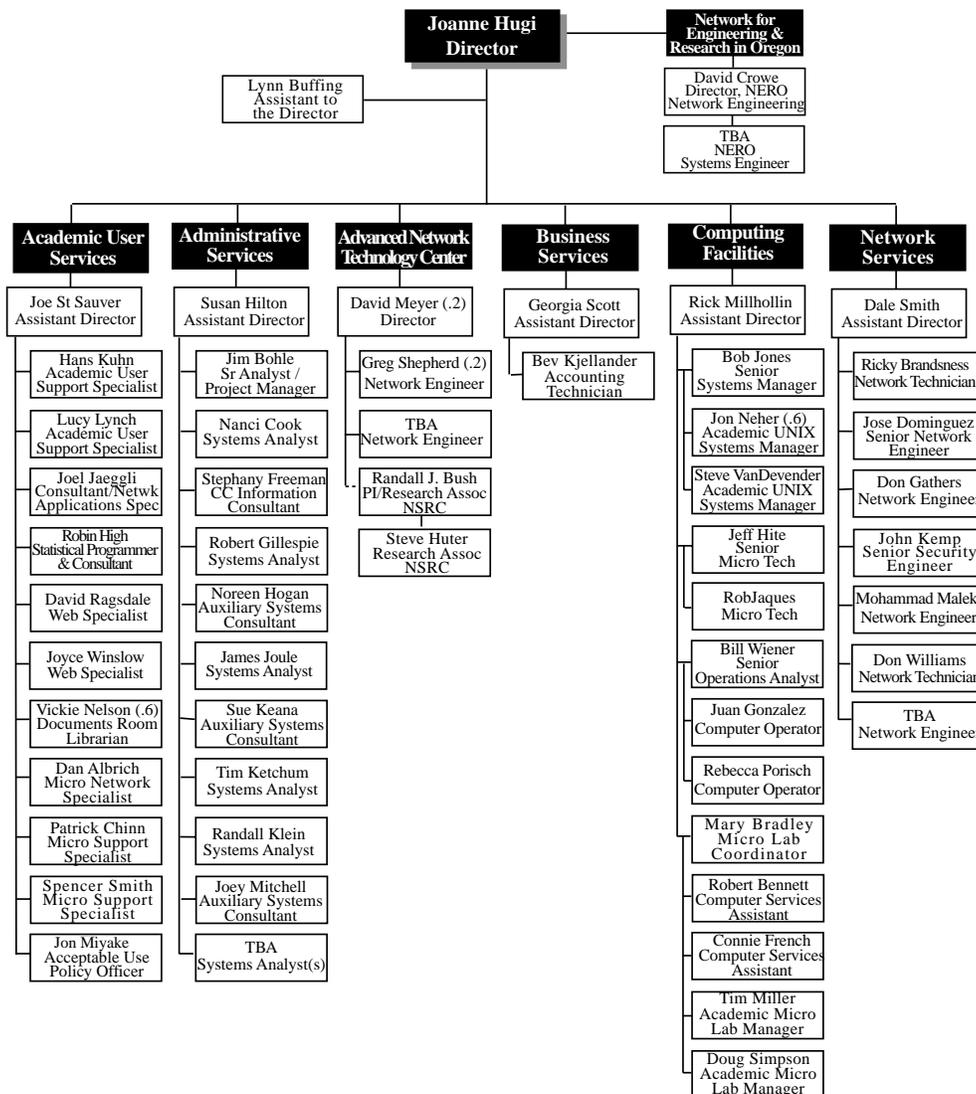
3. Go to the Computing Center Documents Room to check out the two SAS installation CDs (24 hour time limit).

4. Read Chapters 1 and 2 of the installation instructions on CD 1.

5. When you're finished, return the two SAS installation CDs to the Computing Center Documents Room.

Note: It may take over an hour to install the software and you'll need 700 megabytes of free disk space.

Computing Center Staff Chart 2000



Heads Up: Public Domain Access to Change January 1

Dan Albrich

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Starting January 1st, 2001, our public domain servers will transition to an "IP-only" environment. (IP, or Internet Protocol, is the standard method of computer communication used around the world. Examples of IP applications, among others, include Web, Email, Telnet/SSH, FTP, and News.)

In many cases, this change will affect the method you use to connect to the public domain servers. Pertinent details for both Macintosh and Windows users are outlined below:

Macintosh Users

Macintosh users can connect to CC Public Domain by opening the Chooser, selecting the "AppleShare" icon and then the button "Server IP Address," and entering **ccpd** or the full TCP/IP name **ccpd.uoregon.edu**.

Mac OS 9 or higher: If you're running Mac OS 9 or higher, you can use the Network Browser found under the Apple

menu to browse for CC Public Domain under the "uoregon.edu" group. When prompted for username and password, select the "Guest" radio button and then either "CC Public Domain" or "System Software" volume. Once the volume you select is mounted on your desktop, you may wish to use the "File" and "Make Alias" menus to create a shortcut for faster future access.

The URL for file and folder view is **afp://ccpd.uoregon.edu**. For FTP access, it's **ftp://ccpd.uoregon.edu**. URLs can be entered into your web browsers "Address" or "Location" field.

Older Mac OS versions: If you are running an older version of Mac OS, you may not see the "Server IP Address" button described above. The preferred connection method is possible with Mac OS 7.6.1 and higher, but you'll want to see our web pages with steps and pictures to complete the software updates necessary. Please also feel free to contact us for further assistance (microhelp@oregon, 346-4412).

Important Related Note: *Due to compatibility problems with MacTCP, Macintosh computers using MacTCP will cease to function on the UO network January 1st, 2001 (per our prior newsletter*

article: http://cc.uoregon.edu/cnews/spring2000/mactcp_unreliable.html) **This means you will need Mac OS 7.6.1 or higher.** We recommend users update to any PowerMacintosh which also includes G3, G4, and iMac with system 8.1 or higher.

Windows Users

For many users the connection method will remain identical to what it has been. The easiest method is to select the "Start" button followed by the "Run..." menu. Then type **\\public\software** and select the "OK" button.

If you use the Network Neighborhood, look for Public in the "Uoregon" group.

The URL for accessing public will remain **ftp://public.uoregon.edu**. You can enter this URL into your web browser's "Address" or "Location" field.

Additional Information

If you need more help connecting to a public domain server, see the step-by-step instructions and pictures at <http://micro.uoregon.edu/pd>

Akamai Speeds Web Content Delivery at UO

Over the summer, distributed content delivery from *Akamai*, the foremost provider of global, high-performance services for delivering Internet content, was set up on the Oregon Internet Exchange (OIX), which is located at the University of Oregon.

This delivery service from *Akamai* (Hawaiian for "intelligent, clever, and cool") improves web site speed and reliability by delivering rich web content from its network of more than 4250 servers around the globe. By routing and replicating content over a large network of

distributed servers, *Akamai* ensures that users get web content delivered from the server closest to them. This system avoids congestion as well as the risk of failure from a single, centralized point.

With the deployment of *Akamai* servers on OIX, UO users and OIX partners are assured of rapid, reliable access to a wide range of popular web content, while conserving use of wide area bandwidth. A recent bandwidth study found *Akamai* to be the source of more traffic to Oregon Wide Area Network (OWEN) and NERO (Network for Edu-

cation and Research in Oregon) users than any other single autonomous system, making its location at OIX particularly useful to OWEN/NERO customers as well as the UO itself.

Major *Akamai* customers include Yahoo!, CBS, CNN Interactive, Britannica.com, and NASDAQ.com.

For more facts about *Akamai*, see

<http://www.akamai.com/>

<http://www.wirednews.com/wired/archive/7.08/akamai.html>

<http://www.cookreport.com/09.03.shtml>

COMPUTING CENTER GUIDE

UO Web Site

<http://www.uoregon.edu/>

Computing Center Web Site

<http://cc.uoregon.edu/>

Microcomputer Services

(Room 151 Grayson Hall)

- microcomputer technical support
- help with computing accounts, passwords
- scanning, CD-burning, digital video
- help with damaged disks, files
- system software help
- Internet connections, file transfers
- public domain software, virus protection
- software repair (carry-in only, \$60/hour, 1/2 hour minimum)

346-4412

microhelp@oregon.uoregon.edu

<http://micro.uoregon.edu/>

Statistics Consulting

Robin High

346-1718

robinh@darkwing.uoregon.edu

<http://darkwing.uoregon.edu/~robinh/statistics.html>

Large Systems Consulting

(Rooms 233-239 Computing Center)

- VMS, UNIX (Gladstone, Darkwing, Oregon)
- email, multimedia delivery
- scientific and cgi programming
- web page development

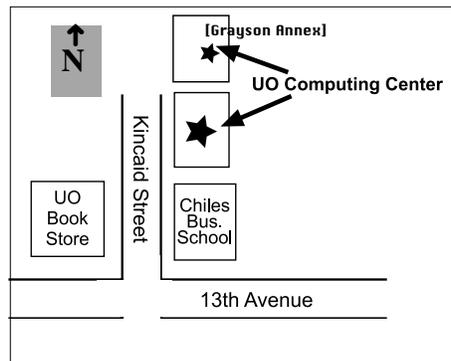
346-1758

consult@darkwing.uoregon.edu

consult@gladstone.uoregon.edu

consult@oregon.uoregon.edu

<http://cc.uoregon.edu/unixvmsconsulting.html>



Documents Room Library

(Room 175 Grayson Hall)

346-4406

<http://darkwing.uoregon.edu/~docsrn>

Electronics Shop (151 Grayson Hall)

For computer hardware repair, installation, and upgrade services, call **346-3548** or write hardwarehelp@oregon.uoregon.edu
http://cc.uoregon.edu/e_shop.html

Network Services

Provides central data communication and networking services to the UO community.

346-4395

nethelp@oregon.uoregon.edu

<http://ns.uoregon.edu>

Administrative Services

Provides programming support for administrative computing on campus, including BANNER, A/R, FIS, HRIS, and SIS. Call **346-1725**.

Modem Number

Dial-in modem number for UOnet, the campus network: **225-2200**

Computing Center Hours

Monday - Friday 7:30 am - 5:00 pm

Grayson Hours

Monday - Thursday 7:30 am - 11:30 pm

Friday 7:30 am - 7:30 pm

Saturday 9 am - 4:30 pm

Sunday 9 am - 8:30 pm

COMPUTING NEWS

UO COMPUTING CENTER

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