

COMPUTING NEWS

FALL 2001

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Welcome to campus! Our fall issue is packed with the information you'll need for computing at the UO. If you're moving into the dorms like the freshman pictured here, you'll enjoy direct ethernet connections via ResNet. To learn more about your UO computing account and computing resources on campus, see pp. 2-12.

Welcome to Campus!

How to Get Started Using Your UO Computing Account

When you register for classes, we have automatically generated a computing account for you that consists of a username and password. Your computing account provides both email and dialin access.

(If for some reason you *don't* have a UO computing account, pick up a copy of "How to Get a Computing Account." This handout is available in the Documents Room Library (175 Grayson), and online at http://cc.uoregon.edu/policy/get_account.html)

If you're wondering how to get started using your email account, read on.

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 AUTHORIZE, enter <https://password.uoregon.edu/authorize/> 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 2001 Duckware CD-ROM (see story on page 3).

What About Passwords?

We recommend you select your own password instead of using the one that's generated for you when you register for classes. Here's how:

1. Open your network browser (e.g., Netscape, Internet Explorer) and go to <https://password.uoregon.edu>
2. If you remember your old password, enter your username and old password in the spaces provided. Type in your new password and enter it again for verification.
3. If you *don't* know your old password, you'll need to know your student ID number and PAC code. Go to <https://password.uoregon.edu/authorize/> Enter your student ID and PAC code in the spaces provided, and follow the instructions for creating a new password.

Password security: Passwords should be 6-14 characters long and must be very secure. We recommend you

choose a password that includes a mixture of symbols, numbers, and mixed case. Dictionary words and any part of your name are not allowed.

What About Dialing In From Off-Campus?

Your computing account username and password are the same ones you'll use for dialing in via modem. The only difference you'll notice is that **you must type in your full username address to dial in**, including your account's hostname (e.g., jersmith@gladstone.uoregon.edu, jersmith@darkwing.uoregon.edu)

The modem number for accessing UOnet, the campus network, is 225-2200.

Note: 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, you'll want to contact a commercial Internet Service Provider (ISP).

What About Wireless Access?

You can also access UOnet throughout several public areas on campus by inserting a PCMCIA wireless ethernet card in your laptop computer. For more information about wireless access, see "Campus Wireless Coverage Expands" on page 11.

What Software is Available?

For detailed information about the software installed on Gladstone, Darkwing, and our other large timesharing systems, see "...What Large Timesharing Systems Are Available?" on page 6. You'll find a discussion of UO site-licensed software in the overview of Microcomputer Resources on page 4.

Connecting to UOnet from Campus Housing

Every room in every UO residence hall has a fast ethernet connection (ResNet). You don't need a modem to use it, but you will need an ethernet card. If you are a UO student living in the Residence Halls, University Housing can not only sell you an ethernet card for your computer, but install it and set it up free of charge. For more information about ResNet and details about purchasing an ethernet card, see <http://www.housing.uoregon.edu/resnet/>

UNIVERSITY OF OREGON

COMPUTING CENTER

COMPUTING NEWS

VOL. 16 #4

Computing News is published quarterly by the User Services and Network Applications staff of the Computing Center, 1212 University of Oregon, Eugene, OR 97403-1212.

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Got Extras?

If your campus department receives surplus copies of *Computing News*, you may return them to the UO Computing Center for redistribution.



What Can the New Duckware 2001 CD Do for You?

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

Duckware 2001 is here! As it does each fall, the Computing Center's Microcomputer Services group has released an updated version of the Duckware CD-ROM. Due to the generosity of Sony Disc Manufacturing in Springfield, this year's CD was manufactured without charge. Thanks, Sony!

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

Duckware 2001 comes in separate versions for Mac and Windows. These are available to all current UO students, faculty, and staff at no cost.

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

This year's version expands on the security features introduced in last year's Duckware, including:

- The latest versions of **Norton Antivirus** for both Mac and Windows. (Use "Live Update" to get minor patches and new virus definitions.)

- **SSH** secure shell encryption software for both Windows and Macintosh

- **Web-based email** interfaces for Gladstone, Darkwing, and Oregon that are fast and more secure than other web-based email services

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

- **Internet Explorer 5.5 Service Pack 2 (Windows CD only)**. The newest version of Internet Explorer includes improved support for DHTML- and CSS-based web design.

- **Cisco IP/TV v 3.0**. The IP/TV Viewer enables you to view diverse broadcast programming on your computer, including university lectures, news clips, foreign language programs, and scientific projects.

System Requirements:

To take advantage of Duckware 2001, you'll need:

- a PC running Windows 95/98/ME/2000/NT/XP... or
- a Mac running System 8.1 or better

Where Can You Get It?

Students, faculty, and staff may pick up their copy of the Duckware 2001 CD at one of the following campus locations:

- **Microcomputer Support Center** (151 Grayson Hall)
- **Documents Room Library** (175 Grayson Hall)
- **CC-Grayson Lab** (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 2001, 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:

- Computing Center main foyer
- 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@lists.uoregon.edu). You can also visit them in Room 151 Grayson Hall weekdays from 9 am to 5 pm, or check out their website at

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

Too late to make Duckware...

If you use the Secure File Transfer Protocol (SFTP) for Windows, you can update your SSH version to 3.x by installing it directly over SSH 2.4 (the version provided by Duckware). To get the update, go to ftp://public.uoregon.edu/software/Network_Software/Secure/SSHWinClient-3.0.0-build203.exe

New to Campus? Get Acquainted with

▶ Consulting Help for Your PC or Mac, and More...

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 connect to the Internet from home or on campus
- new student computing accounts information
- password problems
- how to transfer files
- 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. New students can also obtain their account information via DuckWeb (<http://duckweb.uoregon.edu>) using their student ID number and PAC code. 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 particularly complex or hard-to-diagnose problems, Microcomputer Services offers a machine check-in service that costs \$60.00/hour, with a minimum charge of \$30.00. 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

151 Grayson Hall also has public stations for scanning, CD copying and burning, and digital video acquisitions. (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, 45GB disk, 256MB 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 (100MB) and Jazz (2GB) 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 (100MB) and Jazz (2GB) 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.

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@lists.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@lists.uoregon.edu or call 346-4412. Support hours are 9 am to 5 pm Monday through Friday. Visit the Microcomputer Services website at <http://micro.uoregon.edu/> for a variety of useful information specific to computing at the UO.

▶ Site-Licensed Software

The UO has site licenses for a number of software packages you can use on your campus workstation, including:

- **Norton Antivirus.** Available on the Duckware 2001 CD (see article on page 3). See also <http://www.symantec.com/avcenter/>
- **SAS.** SAS users are allowed to install SAS on their PCs both at work and at home. Go to <http://sas.uoregon.edu>
- **Mathematica.** See <http://darkwing.uoregon.edu/~hak/mathematica/>
- **ESRI** (GIS and mapping software such as ArcInfo, ArcView) See <http://www.esri.com>
- **IMSL numerical libraries.** Contact Hans Kuhn at hak@oregon.uoregon.edu

Some of Our Microcomputer Resources

► *Computer Repair, Upgrade Services*

Conveniently located on campus in **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, laptops, and peripherals, including Apple and Windows/Intel machines, and can also offer advice regarding upgrades.

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

Windows/Intel 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-warranty repairs are offered for most Windows/Intel machines.

Upgrades. E-Shop 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 Mac 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. Parking is available in the Grayson parking lot on the west side of the building.

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 "Digital Duck" 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 Rob Jaques or Robert Bennett at **346-3548**.

► *Technical Information and Training Resources*

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. You can search its catalog 24 hours a day at <http://docsrm.uoregon.edu>

Hours are Monday through Friday, 9:30 am to 5 pm. You can borrow books 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/>

► *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 Microcomputing 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 MacG4s and offer color scanning and laser printing, as well as a wide range of graphics software. **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 in Room 101, comprises both an open and an instructional lab. Both labs are equipped with Windows machines, and the open lab has three Mac G4s, a color scanner and a laser printer. **346-0787**

Other Campus Computing Labs:

Knight Library ITC - 346-1935

Science Library ITC - 346-1331

Social Science Instructional Lab - 346-2547

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>

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.

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. 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 some other systems mentioned from time to time:

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

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

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 "What About Dialing In From Off-Campus?" on page 2.) The modem number for accessing UOnet, the campus network, is **225-2200**.

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 con-

tact a commercial Internet Service Provider (ISP). One list of ISPs is available at <http://www.thelist.com/>

What About Special Accounts for Classes and Departments?

If you're teaching an undergraduate class and your students need to access software available only on Darkwing, temporary accounts can be created for their use. For more information, contact Connie French 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 department head or institutional administrator.

Acceptable Use. 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/policy/>

Large Systems Consulting Help

If you have any questions about using the UO's large timesharing computers, contact the large systems consulting group in Rooms 225-239 Computing Center (**346-1758**). Consultants can help with questions about email, multimedia delivery, scientific and CGI programming, and web page development.

For more information about these services, see <http://cc.uoregon.edu/unixvmsconsulting.html>

Timesharing Systems Are Available?

Software on Oregon and Darkwing		
Type of Software	OREGON	DARKWING
Statistics Packages	SAS SPSS SCA SHAZAM LINDO SLAM	sas* lindo bmdp spss Splus rats/estima eqs minitab *also available on gladstone
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
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) tm,tin,nn (USENET News) ssh (secure login) pgp (encryption)
X-Window Only	NETSCAPE (web browser)	netscape (web browser) xv (Image manipulation) staroffice (Office Suite) 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
Mathematics		mathematica* magma matlab maple *also available on gladstone
Miscellaneous		RealAudio server (also available on gladstone) distiller (Adobe Acrobat)

Computing Center's Administrative Services Group Keeps Campus Computing Humming

Whether you're a new student registering for classes via DuckWeb, the administrator of a departmental budget, a payroll clerk preparing payroll, or a staff member using the UO's online directory, your work is being facilitated by the Computing Center's Administrative Services group.

The Administrative Services IT staff supports applications that are used by practically every department on campus, as well as some areas of the Oregon University System. The Knight Library, the EMU, Business Affairs,

Registrars, Admissions, Financial Aid, Human Resources, Facilities Services, Housing, Printing Services, the Student Health Center, Telecommunications, administrative users in the academic departments—all benefit from Administrative Services' policy development, database design, application systems analysis, program development, security planning, and all-around technical support.

Administrative Services is specifically responsible for BANNER applications such as A/R, FIS, HRIS, SIS, FinAid, DuckWeb, DuckCall, the UO Direc-

tory, and the data warehouses. In addition, they support many auxiliary administrative applications including Housing DeDuck dining card, Residence Halls and Family Housing systems, the Student Health Center's appointment system, and Printing Services' job tracking and Quick Copy rating system, to name a few.

If you have any questions about Administrative Services or have specific administrative programming needs, contact Susan Hilton (346-1725, hilton@oregon.uoregon.edu) or Jim Bohle (346-1706, jbohle@oregon.uoregon.edu).

Email at the UO: UO's Webmail Offers a More Secure Email Option

Joyce Winslow

jwins@oregon.uoregon.edu

Your UO computing account gives you access to secure webmail at <http://email.uoregon.edu>. UO webmail is a good choice for new students and others who access their email from multiple locations.

UO webmail is easy to use: you won't need to do any configuration or make modifications to your existing email setup, and it has a clean, understandable interface.

Getting Started. To use the webmail system, open your web browser and go to <http://email.uoregon.edu/> You'll be presented with an entry-level page (Fig. 1) that gives you the choice of logging into Gladstone, Darkwing, or Oregon (the Oregon link takes you to the classic WebMail login page, as shown in Fig. 3).

Security Features. IMHO supports SSL session encryption and uses standard Internet protocols throughout. As it is SSL-enabled and doesn't require Java, cookies, or Javascript, it makes your email more secure.

Another Plus: Gladstone and Darkwing users can use IMHO's Web Email interface in addition to their other favorite mail clients (e.g., Eudora, Outlook) without worrying about messages being moved around as they're read. For example, if you read and save Monday's mail with IMHO, you'll be able to find all the messages you've saved if you decide to open your mail with Eudora on Tuesday.

Some Secure Web Email Options for Your Friends and Family:

If your friends and family prefer sending and receiving email via the web, they might want to know about some free email sites that offer SSL security, such as: **HushMail.com** (<https://www.hushmail.com>) **Lokmail** (<https://www.lok.com/>) **Ziplip** (<https://www.ziplip.com/zlplus/home.jsp>)

You can find other providers of encrypted email service by going to Yahoo and searching for "encrypted email."



Fig. 1. The Web Email entry page. Going to <http://email.uoregon.edu> in your browser takes you to this page.



Fig. 2. The IMHO web email login page for Darkwing. Selecting the "Darkwing" link takes you to this page. (Selecting the "Gladstone" link takes you to an identical login page labeled "Gladstone Web Email.") After entering your username and password, you'll be presented with a page for establishing your email preferences.



Fig. 3. The Oregon WebMail login page. (IMHO is unfortunately not available for Oregon.)

Some Frequently-Asked Questions About Email at the UO

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 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. 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.

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....

- Antivirus software (You can get this on the Fall 2001 Duckware CD-ROM, which is available from the Microcomputer Support Center in 151 Grayson Hall)
- Information on current viruses
<http://www.symantec.com/avcenter/>
- "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/>

Email Security Updates

Campus Listmasters: Guard Against Spreading Email Viruses

If you manage a mailing list on campus and have modified your list's configuration to allow email attachments, it's wise to take extra precautions against email worms.

By adding the following code to your .config file, you can cause all files with questionable extensions to bounce to you for approval before they reach the list:

```
# taboo_body [regexp_array] (undef)
# If any line of the body matches one of these regexps, then the
# message will be bounced for review.

taboo_body          << END
    /^[ ]*[file]*name=\.*\.[pP][iI][fF]\"/
    /^[ ]*[file]*name=\.*\.[lL][nN][kK]\"/
    /^[ ]*[file]*name=\.*\.[bB][aA][tT]\"/
    /^[ ]*[file]*name=\.*\.[eE][xX][eE]\"/
    /^[ ]*[file]*name=\.*\.[cC][oO][mM]\"/
END
```

Please check all bounced messages carefully before forwarding on to your list!

For more information about managing a mailing list on campus, see

<http://cc.uoregon.edu/maillinglists/manage.html>

More File Extensions Defanged

To counter the threat of Trojan Horse viruses, which often appear disguised as email attachments, the Computing Center has implemented a defanging script on Oregon, Darkwing, and Gladstone that checks the file names of email attachments. If the file attachment is of a type that could cause an infection, the system adds the suffix ".txt" to the name. The attachments are not otherwise altered in any way, and this precaution prevents most inadvertent infections on Windows machines.

We recently increased the list of MIME file extensions that are defanged by this system. The current list is:

```
.asf  .bat  .chm  .com  .dll  .exe  .hlp
.hta  .hto  .js   .jse  .lnk  .pif  .reg
.scr  .shb  .shs  .vb
```

If you wish, you can restore an email attachment to its original state by simply removing the ".txt" that was added to the end of the file name. But if you choose to do this, be careful! Before making such changes, we recommend you verify that the sender intentionally sent the email message and attachment to you.

COPS Update Checks User Account Files for Vulnerabilities

The Computing Center is working on an update to the user.chk program in COPS that checks for dangerous permissions on user account files. The new version of COPS is more sophisticated and checks for many more potential vulnerabilities than the old version.

For example, the new COPS has also been modified to check our standard user mail spool file (.mail) and the commonly-created mbox file. As there are quite a few group-writable .mail files or world-readable mbox files, it would help cut down on network "noise" if system administrators on campus eliminate all group or other permissions from their .mail and mbox files.

Below is the current list of files the new user.chk program looks for and the file modes it rejects (i.e., 022 means "no write by group or other," and 077 means "no permissions at all for group or other"):

```
/* remote access control files
*/
{ ".rhosts", 022 },
{ ".shosts", 022 },
/* shell init files */
{ ".profile", 022 },
{ ".login", 022 },
{ ".logout", 022 },
{ ".cshrc", 022 },
{ ".tcshrc", 022 },
{ ".bash_login", 022 },
{ ".bash_logout", 022 },
{ ".bash_profile", 022 },
{ ".bashrc", 022 },
{ ".kshrc", 022 },
{ ".history", 022 },
{ ".bash_history", 022 },
{ ".sh_history", 022 },
/* mail */
{ ".mail", 077 },
{ ".elm", 022 },
{ ".forward", 022 },
{ ".pinerc", 022 },
{ ".pgp", 077 },
{ ".procmailrc", 022 },
{ ".Mail", 022 },
{ ".mail", 022 },
{ ".mbox", 077 },
/* user web directory */
{ "public_html", 022 },
/* other init files */
{ ".dbxinit", 022 },
{ ".distfile", 022 },
{ ".emacs", 022 },
{ ".exrc", 022 },
{ ".netrc", 077 },
{ ".ncftp", 022 },
{ ".ssh", 022 },
/* X window system files
*/
{ ".Xauthority", 077 },
{ ".Xdefaults", 022 },
{ ".Xresources", 022 },
{ ".dtprofile", 022 },
{ ".fvwmrc", 022 },
{ ".fvwm2rc", 022 },
{ ".mwmrc", 022 },
{ ".openwin-init", 022 },
{ ".twmrc", 022 },
{ ".xinit", 022 },
{ ".xsession", 022 },
```

If any of these files and file modes are detected as being mis-set, COPS will generate a warning, allowing systems staff to take appropriate remedial action.

Campus Wireless Coverage Expands

Now you can use your laptop to access the Internet from several locations on campus, including the EMU, campus libraries, and the Law School

This fall, the UO's wireless network is being upgraded to expand coverage and improve security. This upgrade is still underway and is not expected to be completed until winter term, but you can immediately take advantage of the expanded coverage if your laptop and software are compatible with our system.

Software requirements. To use your laptop to connect to the Internet on campus, you'll need to install the new AS 2000 Client (ASC), which authenticates your user ID and safeguards your privacy. Under the new system, you'll be required to provide your email account username and password to connect to the wireless network, much as you do when dialing in with a modem. (ASC for both Windows and Macintosh is available free for download from <http://micro.uoregon.edu/wireless>)

Laptop requirements. You'll need a Windows or Macintosh laptop. Other platforms are currently not supported, but may be in the coming months.

Wireless card requirements. The following cards should work:

- Lucent WaveLAN /IEEE (Orinoco)
- Apple Airport (A11)
- Dell TruMobile 1150 Series
- Avaya Wireless PC Card
- Toshiba Wireless LAN Card
- Compaq WL 110
- Cabletron/Enterasys Roamabout
- Elsa Airlancer MC-11
- ARtem ComCard 11Mbps
- IBM High Rate Wireless LAN
- Buffalo Airstation (Melso) WLI-PCM-L11
- 1stWave 1ST-PC-DSS11IS, DSS11IG, DSS11ES, DSS11EG

Current wireless coverage areas include:

- most public areas of the Erb Memorial Union, the Willamette Atrium, and the Computing Center
- Knight Library (first floor only; full coverage throughout the library will be available sometime in October)



Want to try out the UO's wireless network? With a \$20 refundable deposit, you can check out a WaveLAN wireless ethernet card like this one for two weeks from the Computing Center Documents Room (175 Grayson).

- Math Library (main circulation area)
- Science Library
- AAA Library (main circulation area only; full coverage will be available sometime in October)
- Law School

Checking out cards. With a \$20 refundable deposit, you can check out a WaveLAN wireless ethernet card from the Computing Center Documents Room (175 Grayson). The cards may be checked out for two weeks and may be renewed twice. Call 346-4406 for information.

Need More Information?

For complete, up-to-date information about the UO's wireless network, see <http://micro.uoregon.edu/wireless> The information on this site will be continually updated as wireless upgrades unfold.

If you need further assistance, call 346-4412, or visit the Microcomputer Services office in 151 Grayson Hall weekdays from 9 am to 5 pm.

Join a Newsgroup: Try USENET News

If you're interested in subscribing to any of the hundreds of newsgroups online, you have two USENET news server options at the UO: news.uoregon.edu and platform.uoregon.edu The default server for most shared systems and most public microcomputer labs is news.uoregon.edu (aka, pith.uoregon.edu).

If you're using Netscape to read news, you can either specify a server to use in Netscape's Options menu, or you can try using a URL like news://platform.uoregon.edu or news://news.uoregon.edu To specify the news server you want to use on Darkwing, Gladstone, or another UNIX system, set the NNTPSERVER environmental variable before launching trn, tin, nn, drn, or another news reader, i.e.,

```
% setenv NNTPSERVER platform
```

If you like using that news server, you can then use pico, vi, emacs, or another editor to add that default to your `.cshrc` file. (Group availability and article numbering in individual groups will vary across servers. You may want to save a copy of your `.newsrsc` file prior to trying a different server in case you want to roll back to your old server.)

NOTE: This fall, we've doubled the amount of memory for news.uoregon.edu, eliminating problems with slowness you may have experienced previously.

Acceptable Use of UO Computing Resources Reminder: Respect Online Copyrights

With increasing frequency, the UO is receiving messages from legal bodies that represent the owners of copyrighted materials. These messages typically demand immediate action in addressing detected violations, and the UO is committed to enforcing the integrity of copyrights in all media.

University of Oregon student, faculty, and staff need to be aware that popu-

lar formats like MP3s, which exchange music and other multimedia online, 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 Acceptable Use Policy 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/policy/>

If you have questions concerning acceptable use, please contact Jon Miyake. (miyake@darkwing.uoregon.edu, 346-1635)

New MAPS RBL+ Service Improves Spam Blocking on UNIX Mail Servers



Campus administrators need to reconfigure their mail servers for spam blocking

Steve VanDevender
Academic UNIX Systems Manager
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The Computing Center recently negotiated a campus-wide subscription to the Mail Abuse Prevention System (MAPS) RBL+ service, which combines the RBL, RSS, and DUL into one single list. We are now also mirroring the RBL+ zone file on our own name servers, which will improve performance and reliability, and we've configured our mail servers that were previously using the separate MAPS anti-spam blacklists to use the RBL+ instead.

Because MAPS LLC is ending general free access to its RBL, RSS, and DUL spam-blocking DNS blacklists, you should remove the configuration items for querying blackholes.mail-abuse.org (RBL), relays.mail-abuse.org (RSS), or dialups.mail-abuse.org (DUL).

If you are using Sendmail on a UNIX host within the UO network (128.223.0.10/16) and want to use the RBL+ for spam blocking, your mail server should use phloem.uoregon.edu (128.223.32.35) or ruminant.uoregon.edu (128.223.60.22) as

the first listed name server in `/etc/resolv.conf`. Then, for Sendmail 8.10 or later, add this line to your `.mc` configuration template:

```
FEATURE(dnsbl, `rbl-plus.mail-abuse.org', `MAPS-listed host:  
http://mail-abuse.org/cgi-bin/lookup?`\${client\_addr}') dnl
```

If you have Sendmail 8.9, replace "FEATURE(dnsbl, ...)" with "FEATURE(rbl, ...)". Once you rebuild your `sendmail.cf`, install it, and restart sendmail, you will then be able to query the RBL+ blacklist.

For a description of how to use the RBL with Sendmail and other mail server software, see

<http://www.mail-abuse.org/rbl/usage.html>

(Note that you should replace "blackholes.mail-abuse.org" in their examples with "rbl-plus.mail-abuse.org")

It is also possible to distinguish RBL, RSS, and DUL-listed hosts by the IP address returned from an RBL+ query, if you believe it is desirable to do so and are willing to do the fancy Sendmail hacking.

If your mail server does not reside in the 128.223.0.0/16 address space, you will be unable to query our copy of the RBL+ blacklist. This is a contractual requirement of our subscription. If you are running a personal mail server, you may be able to negotiate your own contract with MAPS at no charge for query access to the RBL+, RBL, RSS, or DUL. See <http://www.mail-abuse.org/feestructure.html> for details.

Got Spammer Complaints?

If you need help translating obscured spammer web addresses, go to <http://www.samspade.org/>

Traveling? Check Out These Online Resources

Joe St Sauver, Ph.D.

Director, User Services and Network Applications
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If you're planning leisure travel as a way of doing your part to support our struggling travel industry, or if you are a student thinking about going home over winter break, you may want to know about some online travel resources to help you plan your trip.

The three most popular online sites for checking or booking air fares are probably Orbitz (<http://www.orbitz.com/>), Travelocity (<http://www.travelocity.com/>) and Expedia (<http://www.expedia.com/>).

To test those sites, we checked fares for a dozen hypothetical off-peak trips. We arbitrarily picked Thursday, November 15 for our departure and Tuesday, November 20 for our return. All trips were round trip, for a single adult, and departing Eugene. Tested destinations included Spokane (GEG), Seattle, San Francisco, Denver, Chicago, Phoenix, Orlando, Honolulu, Quebec City (YQB), Paris (CDG), Tokyo (NRT), and Rio Di Janeiro—a mix of cities representing routine and more exotic travel destinations:

What we found is that in most cases you should really check *all three* sites, because no single site could be counted on to consistently offer the lowest fare, although Orbitz seemed to generally do a little better than the others.

What About Lodging?

Virtually all major hotel/motel chains now have online websites, but the quality of those sites tends to be rather uneven in our experience.

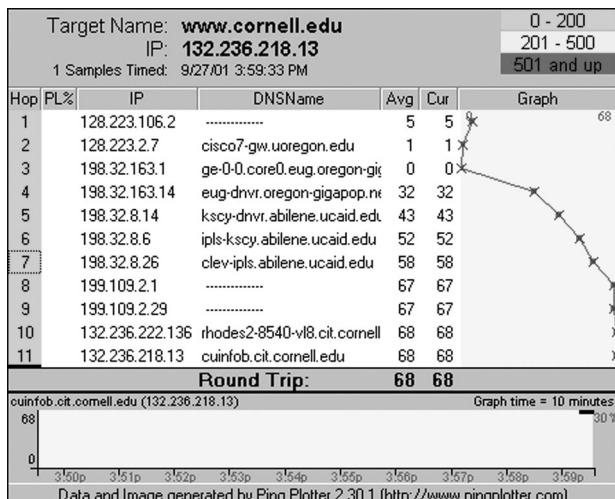
One one-stop web lodging website you may want to consider as an alternative to going on a chain-by-chain search is <http://www.usahotelguide.com/>. This site does a really nice job of showing a wide variety of rooms for any given location, and if you click "View All Rates and Details" for a given property, you may be pleasantly surprised at some of the discount offers listed for many chains.

Note: Official travel for university business needs to be conducted in accordance with university travel policies (<http://baowww.uoregon.edu/traveladministration.htm>), which are currently in the process of being reviewed (<http://baowww.uoregon.edu/travel/travelreviewprocess.htm>).

	GEG	SEA	SFO	DEN	CHI	PHX	ORL	HNL	YQB	CDG	NRT	RIO
ORB	\$185	\$153	\$216	\$257	\$346	\$204	\$298	\$535	\$545	\$583	\$741	\$1170
EXP	\$185	\$153	\$227	\$323	\$405	\$249	\$333	\$560	\$568	\$583	\$741	\$1175
TRY	\$174	\$132	\$227	\$323	\$418	\$249	\$400	\$541	\$708*	\$1197	\$741	\$1371

* Travelocity suggested a date change, which would permit a fare of \$465

Windows Users: Try Ping Plotter Network Traceroute Utility



A sample Ping Plotter graph detailing the network route taken from a UO desktop to www.cornell.edu

Every once in a while, you find a utility that really does a nice job of handling a simple but important task. Ping Plotter, which graphically displays the network route your traffic takes from your Windows desktop to a remote site, is one such utility.

Ping Plotter is available in both a freeware version that cannot save copies of the graphs it generates, and a shareware version that allows output to be saved. You can get PingPlotter from <http://www.pingplotter.com/>

One caveat: Please do NOT leave PingPlotter running continually! Use it when you need to understand the route between your desktop and another site, but then hit stop.

Try Using PHP to Create Dynamic Web Pages on Gladstone, Darkwing

Steve VanDevender
stevev@darkwing.uoregon.edu

PHP, a popular scripting language for dynamic web pages, is now available for use in CGI scripts on both Gladstone and Darkwing web servers.

PHP 4.0.6 has been installed to work like other CGI scripting languages, such as Perl. A slight drawback to this approach is that PHP scripts need to start with a line containing only `#!/usr/local/bin/php` and need to be made executable (via the UNIX shell command `chmod +x`). However, when installed in this way, PHP scripts work just like other CGI scripts and have the ability to create and update files.

Our Apache server configuration has been changed so that executable files whose names end in `.cgi`, `.pl` (Perl), and `.php` (PHP) will be automatically recognized and executed as CGI programs when placed in web page directories. (Previously, only `.cgi` was recognized.)

Note that the same risks apply to using PHP as they do to any other CGI scripting language. If you're careless, others will be able to modify files in your account or perform actions in your name. In addition, the standard Apache suEXEC security checks will be applied to PHP scripts (see <http://cc.uoregon.edu/cnews/summer2000/suexec.html> and <http://darkwing.uoregon.edu/manual/suexec.html#model>)

Below is an example of a simple PHP script :

```
#!/usr/local/bin/php
<html><head><title>PHP Info</title></head>
<body>
<?php phpinfo(); ?>
</body></html>
```

To run it, place this script in a file named **info.php** in your **public_html** directory. Use the command `chmod +x ~/public_html/info.php` to make the file executable. You'll then be able to access it from <http://darkwing.uoregon.edu/~yourusername/info.php>

Replace "yourusername" with your own username (if you do this on Gladstone, replace "darkwing" with "gladstone").

For more information about PHP, see <http://www.php.net/> The Computing Center Document's Room (175 Grayson Hall) also has books on PHP that are available for checkout.

IP/TV Brings Broadcast-Quality Video to Your Computer Screen

Did you know you can watch TV-quality video on your networked Windows PC?

The UO has obtained a site license for Cisco's IP/TV product and distributes it on the 2001 PC Duckware. If you're running Windows 95/98/ME/2000/XP or NT and you're directly connected to the network (not dialing in from home over a modem), install IP/TV from Duckware and give it a try.

With IP/TV, you can view programs that are multicast by the UO's IP/TV server, as well as programs multicast from other locations via the MBONE, a network for real-time conferencing. Current programming includes live news broadcasts, computer conferences and conventions, prerecorded NASA flights, and Internet Radio. (Note that you may see announcements for unaccessible sessions.)

Downloading Information. If you don't have a Duckware CD handy, you can download IP/TV from the web. For system requirements and step-by-step IP/TV installation instructions, see <http://cc.uoregon.edu/iptv/>

If you need further assistance installing IP/TV or have questions regarding its use, contact the User Services and Network Applications staff at 346-1758, or send email to multicast@lists.uoregon.edu

IETF Meeting Videos Now Available Online

Video from the last three Internet Engineering Task Force meetings is available online for those who may be interested in the technical discussions which took place.

Please see:

London:
<http://videolab.uoregon.edu/events/ietf/ietf51.html>

Minneapolis:
<http://videolab.uoregon.edu/events/ietf/ietf50.html>

San Diego:
<http://videolab.uoregon.edu/events/ietf/ietf49.html>

If you have any questions about these video resources, please contact Joel Jaeggli at joelja@darkwing.uoregon.edu

Behind the Scenes: Technology Plays Vital Role in UO Sports

Casanova Center technicians and the Computing Center's Network Services work behind the scenes to help produce winning teams

Joyce Winslow
jwins@oregon.uoregon.edu



From his keyboard, Steve Pohl zooms in on a play at the scrimmage line

Tucked away in a southeast corner of the Casanova Center, Steve Pohl and his assistant John Duncan are busy at their computer keyboards, parsing the data that help the UO's athletic teams refine their skills and strategies in their quest for winning seasons.

Steve, who has been doing this job since 1996, works full-time analyzing football videos, while John devotes the bulk of his days to basketball, track, soccer, and volleyball footage.

The north wall of their office is the main tech wall, which is stacked floor to ceiling with the monitors, patch bays, and recorders that aid in producing multiple copies of the sports videos that coaches and players need to perfect their game.

Game and practice videos are shot simultaneously from the sidelines and the end zone to give game analysts the greatest possible range of perspective. The live action is instantly captured and fed to Steve's office over a high-

speed network connection so that Steve can immediately begin breaking down each video into several categories, highlighting defense, offense, and special teams. Assisted by a graduate assistant coach, he then assigns data to each play and uploads the completed files onto the network so the coaches can later access the information at will from their computer screens. This year, all coaches received PC-based laptops, giving them even more flexibility to study the action anywhere, anytime—whether they're on the road, in the field, or at their desks.

The data is so carefully parsed and sorted that each play can be broken down into microseconds. Coaches can select any play, quickly and easily zooming in and out on a particular segment and pausing or replaying it as often as they like.



Steve points out some of the special features of the Casanova Center's "tech board"

The silent partner in this complex enterprise is the Computing Center's Network Services, which has been central in designing and engineering campus communications systems during the past decade. Network Services staff, under the direction of Dale Smith, assisted with the installation of the Casanova Center's first fiberchannel system and hooked up the Autzen Stadium megavision scoreboard in 1998. Network Services also devised the router system that channels data over fiber network and ethernet to the coaches' offices and to the megavision board at Autzen.

Who's Who at the

Meet some members of our staff

Joyce Winslow
jwins@oregon.uoregon.edu



Amy McCoy
CC-EMU Lab Manager

Before entering the computing field, Ashland native Amy McCoy avidly pursued a lifelong interest in the Middle East. In 1986, she graduated from UC Berkeley with a B.A. in Middle Eastern Studies and, until the Iran-Iraq war put a damper on her plans to accept a Fulbright to study in Kuwait, Amy fully intended to complete a Masters in Islamic studies.

Her plans interrupted, Amy went job hunting and landed a job that required her to provide computer training for businesses in the San Francisco Bay area. While her background had only peripherally involved computing, Amy embraced the challenge. "I told myself that if I can figure out Arabic, I can certainly figure out computers," she laughs. And so, without her quite realizing it, her career as a computer consultant and lab manager began.

In 1995 Amy returned to Oregon and earned a Masters in Management from Southern Oregon University. For five years, she ran two computer labs and coordinated technical training on the SOU campus. It was there she met her husband Jan, whom she married last January.

Jan, a former social studies teacher and state board of education bureaucrat who coincidentally also specialized in Middle Eastern Studies, is currently fulfilling a lifelong

dream of getting a Ph.D. in Education and began classes at the UO last fall. The newlyweds relocated to Eugene, and now Amy, Jan, and their yellow labrador retrievers Daisy and Duke share a home in the River Road area.

Fly fishing is among Amy's favorite pastimes, and last June she and Jan traveled north to Calgary to cast their lines during a special week-long vacation. The demands of work and study will probably cut down on their travel time in the near future, but some day Amy dreams of returning to Egypt and sharing its cultural riches with her husband.



Stephen Fromm
Operations and Systems Engineer, NERO

Stephen Fromm can't resist a challenge. His intellectual curiosity and desire to thoroughly explore any subject that piques his interest led him to study Chinese as well as the world's religions, and he graduated from the UO with a double major in Chinese and Religious Studies in 1997.

Immediately following graduation, Stephen returned home to Northern California to contemplate his options. For a brief time he flirted with the idea of earning a master's degree in history, but ultimately he opted for what promised to be a more practical career in computer programming. A year later, he re-enrolled at the UO and graduated last June with a B.S. in Computer Science.

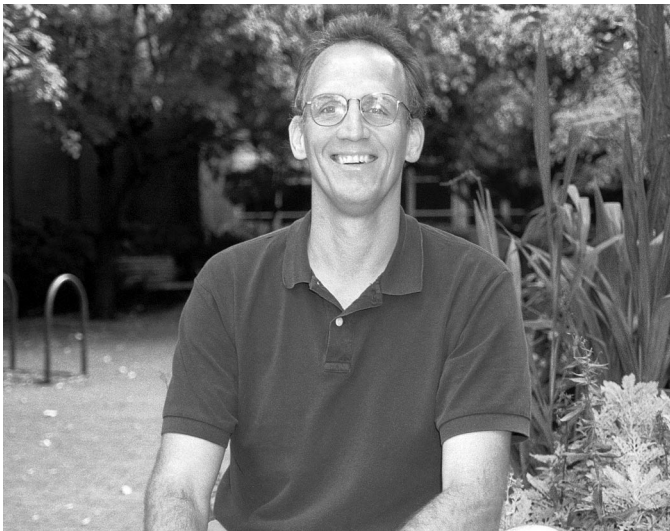
Stephen's new career path was fortuitous. Programming satisfied his problem-solving bent and provided both continuous challenges and steady employment. While still a student, Stephen worked for several years as a Microcomputer Services consultant in the Computing Center. During that period, he became interested in system administration and network security and also ex-

Computing Center

panded his knowledge of Linux. When a student position opened in Network Services' security division, Stephen took the opportunity to pursue his growing interest in network-related disciplines, and after graduation he signed on with NERO (the Network for Education and Research in Oregon).

Stephen's current challenge is rewriting the portion of the NERO codebase that gathers and illustrates network data. When this project is completed, Stephen anticipates that it will be easier to use and configure the program and that the codebase will be easier to maintain.

When it's time for break, Stephen often heads for the driving range to practice his golf swing or plays a tune on his harmonica. A blues fan who's characteristically delved deeply into the genre's history, Stephen frequently listens to Son House and Muddy Waters for inspiration.



Ron Holland
Systems Analyst, Administrative Services

Ron and his wife Deb both hail from Michigan. They met while majoring in computer science at Western Michigan

University and initially became acquainted with Eugene when Deb enrolled in graduate school at the UO in 1989. While his wife worked to earn her Ph.D. in protein crystallography, Ron took a job as an administrative programmer on campus, working for a year at the Computing Center before joining the Financial Aid office.

Eugene's mild climate, myriad bike paths, and easy pace of living appealed greatly to Ron, who is a cycling enthusiast and serious track and cross-country runner. But when Deb was offered a post-doctoral position with Parke-Davis Pharmaceuticals (now Pfizer) in Ann Arbor, the couple returned to their home state in 1994.

Ron found work as a contract programmer, providing support and development for BANNER financial aid modules to such clients as the University of Vermont and Roosevelt College in Chicago, and later developed web-based applications for Parke-Davis. Subsequently, he joined Parke-Davis full-time to manage a small group of systems programmers supporting computational chemistry.

By this time the Holland family had grown to include baby Jordyn and two toddlers, Damon and David. The pressures of big-city life compounded the couple's already hectic schedule of child care and professional duties, and Ron and Deb began to dream of moving back to Eugene and enjoying a more relaxed lifestyle. Last June, that dream became reality when Ron accepted a programmer position with the Computing Center's Administrative Services group.

The Hollands have wasted no time putting down roots. They've already purchased a home here, and Damon is starting kindergarten this fall. Ron bikes to and from work and has resumed his routine of running five days a week on Pre's Trail. This summer, he and the boys have taken to the water in an inflatable kayak whenever they've had the chance.

Route Views Archive Available Online

Archival copies of data from the UO's Route Views Project are now available at <http://www.antc.uoregon.edu/route-views/>

The Route View project provides views of the Internet BGP routing tables from various providers at various locations around the Internet, showing for each prefix/provider location pair the route that traffic would take to that prefix from that provider location.

What's new is that we are now taking a snapshot of both the full routing table and dampened routes only every two hours and archiving them online at <http://rv-archive.uoregon.edu/>

A typical snapshot amounts to a little over four million records, which works out to roughly 12MB once compressed. These snapshots are a rich source of raw material for analysts, and are already being used by a variety of researchers worldwide.

NSF Hosts Distinguished Lecture Series on Large-Scale Networking

This fall, the National Science Foundation (NSF) begins hosting the Large Scale Networking (LSN) Distinguished Networking Lecture Series. The series is sponsored by the federal LSN Working Group, which coordinates research among NSF, the Defense Advanced Research Projects Agency (DARPA), the U.S. Department of Energy, the National Institutes of Health, NASA, and the National Institute of Standards and Technology. The talks, which are being held at NSF headquarters in Arlington, Virginia, promote a national discussion of advanced networking topics for the science and engineering research community.

All lectures begin at 2 pm EST. They will also be available online at <http://www.ngi-supernet.org/conferences.html>, but you'll need RealPlayer to access them (if you don't have RealPlayer, you may download it without charge from <http://www.realnetworks.com/>).

• October 9, 2001

The Secure All-Optical Internet of 2010 — What are the key open research questions?

Dave Farber, Dept. of Computer and Information Science, University of Pennsylvania
NSF Room 375

• December 11, 2001

Challenges for Network Research

Bob Aiken, Sr. Manager, Academic Research and Technology Initiatives, CISCO Systems, Inc.
NSF Stafford II Room 555

• January 8, 2002

Deploying the Internet—why does it take so long, and can research help?

David Clark, Sr. Research Scientist, Massachusetts Institute of Technology
NSF Room 110

• February 12, 2002

Wireless Internet: Promises and Challenges

David Goodman, Dept. of Electrical and Computer Engineering, Polytechnic University
NSF Room 110

• March 12, 2002

Customer-Owned Wavelengths & Fiber—the next evolution in research networks

Bill St. Arnaud, Senior Director, CANARIE, Inc.
NSF Room 110

* **Note:** The first lecture in the series, *Global Network Requirements for Research* by Michael McRobbie, the VP for Information Technology at Indiana University, was originally scheduled for Tuesday, September 11, but has been postponed until a later date. For details, see

<http://www.nsf.gov/home/visit/visitjump.htm>

For more information about this series of lectures, contact:

Tom Garritano (media): tgarrita@nsf.gov (703) 292-8070

Alan Blatecky (others): ablateck@nsf.gov (703) 292-8950

Dave Beverstock (webcast, logistics), dbeverst@nsf.gov (703) 292-8900

Check Out the Latest Training Videos and CD-ROMs in the CC Documents Room

If you need an alternative to the workshop format, you can use these resources to hone your computer skills

Vickie Nelson

Documents Room Librarian

vmn@oregon.uoregon.edu

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, and you can use your UO picture ID to check them out.

Recent acquisitions to the Documents Room's collection of training materials include CD-ROMs on Director 8 and Dreamweaver 4, and videos covering 3D Studio Max 4 and FileMaker Pro 5. We also have training videos on most of the current versions of the Microsoft Office products, as well as videos on PhotoShop, Flash, PageMaker, HTML, JavaScript and other computer-related subjects.

The Documents Room is located on the ground floor of Grayson Hall in Room 175. Hours are 9:30 am to 5:00 pm Monday through Friday during the academic term. For more information, call 346-4406 or see

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

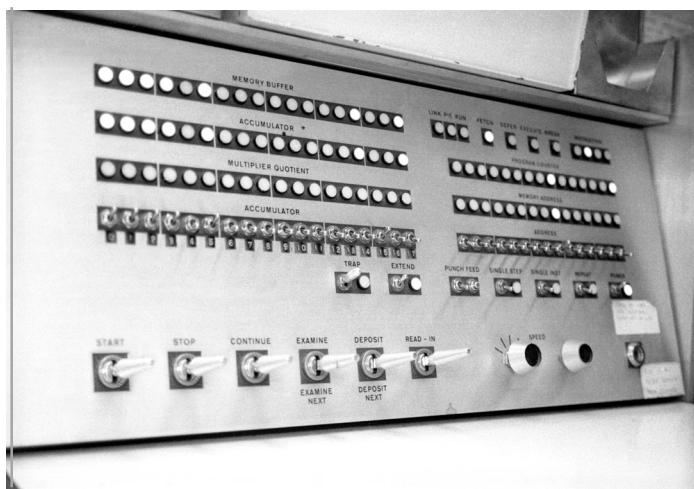
FITT Center Moves

The Faculty Instructional Technology Training (FITT) Center has moved across the hall to Media Services Room 19 on the ground floor of the Knight Library. Here, faculty and GTFs can get help with web publishing, presentations, digital video and audio, graphics and digital images, CD-ROM mastering, and other technology tools. Regular drop-in hours are 11 am to 6 pm Monday through Friday. You may also request a reservation for any time (including weekends) and the staff will try to arrange it. For more information about FITT Center services, see <http://libweb.uoregon.edu/fittc/>

Goodbye to the PDP7: A Computing Pioneer Retires

Joyce Winslow
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At the end of this year, when a DEC PDP7 computer leaves campus, a part of the UO's computing history will disappear.



A close-up of the PDP7's switch panel

Since 1963, when it was purchased with funds from a National Science Foundation grant, the PDP7 computer has served as an invaluable research tool for physics professor Harlan Lefevre and his colleagues.

Four years after Prof. Lefevre came to the University of Oregon in 1961, and three years before the UO built the



A view of the tape drive and monitors

Computing Center, the PDP7 was installed in the basement of what was then the Student Health Center (now Volcanology).

The computer, which has a magnetic core memory with a capacity for 8000 18-bit words of code, was first linked to an IBM 360-50 and later was linked in real time to the Computing Center.

For more than 30 years, the PDP7 served the university as a vital research tool. Initially, the computer was used to analyze neutron physics data, and 20 Ph.D. candidates used it to complete their theses in nuclear physics. Subsequently, the PDP7 was put to work in a Federal Aviation Administration safety project to detect the presence of



Professor Lefevre prepares to test the PDP7's paper tape drive

explosives in luggage. The venerable computer analyzed data from a special scanner that recorded the presence of hydrogen, carbon, nitrogen, and oxygen in sample suitcases.

Since 1992, when a Sun computer took its place, the PDP7 has been officially retired from duty. Although it exhibits some of the creakiness of old age, such as the minor damage to its paper tape drive that was evident on the day of our visit, it is still functional. Prof. Lefevre, happy to demonstrate the machine's virtues, can easily coax it to life again. At his bidding, it lights up and hums with the same vitality it exhibited nearly 40 years ago.

Sadly, this bit of computing history will be gone forever by the end of this year, when it will be removed from its longtime home with the accelerator that was its partner in research for so many years.

UO Joins 'The Quilt'

This nonprofit regional networking project is dedicated to advancing research and education in the U.S.

The University of Oregon recently accepted an invitation to become a member of The Quilt, a UCAID (University Corporation for Advanced Internet Development) project that works to support research and education in the U.S.

The project's mission and goals are directed by EDUCAUSE, a group of more than 1,800 colleges, universities, and education organizations that promote the use of information technology in education, and SURA, the Southeastern Research Universities Association. Its specific aim is to provide advanced network services to the broadest possible research and educational community by ensuring efficient, cost-effective network services and representing the group's common interests to government and industry organizations involved in network development and delivery.

More than a dozen other Quilt participants provide regional network aggregation. These currently include:

CENIC (Corporation for Education Network Initiative in California)

FRGP (Front Range Gigapop)

GPN (Great Plains Network)

MAX (Mid-Atlantic Crossroads)

Merit (Merit Network, Inc.)

MREN (Metropolitan Research and Education Network)

North Carolina Gigapop

Net.Work.Virginia

NoX (Northern Crossroads)

NYSERNet

OARnet

PNWGP (Pacific/Northwest Gigapop)

Pittsburgh GigaPop

SoX (Southern Crossroads)

Texas GigaPop

For more information on The Quilt and its mission, see:

<http://www.thequilt.net>

Itanium-Based Systems Beginning to Ship

Joe St Sauver, Ph.D.

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We're beginning to see mainstream vendors such as Hewlett Packard offer workstations and servers based on Intel's new Itanium/IA-64 processor. If you haven't been following this processor, see Intel's extensive documentation at <http://www.intel.com/itanium/index.htm>, including impressive benchmark results at <http://www.intel.com/eBusiness/products/ia64/overview/bm012101.htm>

Before you rush off to buy one, however, you should note that the pricing for these early IA-64 products is aligned with traditional UNIX workstation pricing, not with that of today's extremely cost-competitive commodity PC market.

For example, HP's new i2000 workstation with a 64 bit Itanium running at 733MHz, and with an 18GB HDD, 1GB of SDRAM, and both Windows XP and HP-UX Unix is being quoted at just under \$8,000 at HP's online store (see <http://www.hp.com/workstations/products/itanium/i2000/summary.html>) If you want a dual processor i2000, the tab rises to just under \$15,000.

Given that pricing, the current performance available from Pentium 4-based systems, and marketplace knowledge that the McKinley processor family (aka Itanium II) is in testing, many customers who might otherwise be expected to immediately jump on new Itanium-based systems may end up waiting. On the other hand, if you're a developer, it's clear you'll want to be grinding or tuning your products for that processor family.

Using Chime to View Chemical Molecules

Remember struggling to visualize three dimensional models when you were taking chemistry classes? Remember the old Tinker-Toy-like build-a-molecule kits? If so, wait until you see how the chemical world visualizes molecules now! The emerging standard for molecular visualization on the web is Chime, which has a free viewer available from <http://www.mdlchime.com/chime/>

A nice Chime tutorial is available online at

http://c4.cabrillo.cc.ca.us/projects/chime_tutorial/html/index.htm

Once you have the plug-in installed and understand the basics of working with Chime, check out some websites which use Chime to visualize chemical molecules, proteins, etc., such as:

<http://www.dcu.ie/~chemist/pratt/pdb/gallery.htm>

<http://www.umass.edu/microbio/chime/>

<http://cactus.nci.nih.gov/ncidb2/>

<http://molbio.info.nih.gov/cgi-bin/pdb>

<http://www.wellesley.edu/Chemistry/Flick/molecules/newlist.html>

Or see some "Molecule of the Month" websites such as:

<http://www.bris.ac.uk/Depts/Chemistry/MOTM/motm.htm>

<http://www.chem.ox.ac.uk/mom/>

<http://www.ch.ic.ac.uk/motm/>

<http://www.phc.vcu.edu/feature/index.html>

Volatile Market Conditions Affect Network Infrastructure Companies

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Earlier in the year, we alerted you to potential disruptions associated with California's electricity shortfalls (see http://cc.uoregon.edu/cnews/winter2001/power_short.html) because of the impact that could have on your network connections. Likewise, we believe you should also be aware of the potentially disruptive effect of volatile financial markets on Internet network providers.

Specifically, while consumer-oriented and business-to-business Internet "dot bombs" have become commonplace, for the first time major Internet infrastructure companies—with tangible physical assets such as fiber optic networks and network hardware devices—are also experiencing widespread financial problems.

For example, a number of major network providers have had their common stock delisted from the NASDAQ and/or have filed for bankruptcy, or are otherwise showing signs of financial difficulty. Additional firms appear poised to join them unless market conditions improve.

Current casualties include:

- **Winstar Communications.** On April 18th, 2001, Winstar Communications filed for Chapter 11 protection, and on April 26th, that company was delisted by NASDAQ.

- **PSINet.** On April 23rd, 2001, PSINet, a major Internet backbone carrier, was delisted from the NASDAQ. On June 1st, it filed for Chapter 11 bankruptcy protection.

- **CAIS Internet.** On May 24th, 2001, CAIS Internet (now Ardent Communications) was delisted by NASDAQ.

- **360networks.** On June 28th, 2001, 360networks filed for Chapter 11 protection. It was delisted from the NASDAQ on July 27th.

- **Covad Communications Group.** On July 20th, 2001, Covad Communications Group, a leading national DSL provider, was delisted from the NASDAQ National Market. On August 15th, the company filed a Chapter 11 bankruptcy petition.

- **Electric Lightwave.** On August 7th, 2001, Electric Lightwave announced it was moving its common stock from the NASDAQ National Market System to the NASDAQ SmallCap Market because it no longer meets the criteria for inclusion on the NASDAQ National Market System.

- **Rhythms NetConnections, Inc.** On August 13th, 2001, the Wall Street Journal announced that Rhythms NetConnections, Inc., a national DSL provider, would be ceasing operations.

Networking companies whose stocks were trading below a dollar a share on September 5th, when this article was prepared, include:

Company	Price/Share (September 5, 2001)
AtHome CP A	\$0.39 (down from \$18.5625 earlier in the year)
Exodus Communications	\$0.69 (down from \$66.4375 earlier in the year)
Globix Corp	\$0.66 (down from \$32.8750 earlier in the year)
MetroMedia Fiber	\$0.97 (down from \$39.1250 earlier in the year)

Companies whose shares routinely trade below a dollar a share, as well as companies which satisfy other trigger criteria, are subject to delisting by the NASDAQ. For a list of stocks which have been delisted by the NASDAQ, see <http://www.nasdaqnews.com/asp/DailyListRead.asp>

While it is true that in many cases troubled Internet companies with tangible physical assets may recover, or may be successfully reorganized or acquired, under some circumstances network users of those services may experience disruptions and may need to be flexible during transition periods (while the companies merge or refocus their operations, or work to control costs and improve their profitability).

Disclaimer: The above market note should not be considered investment advice. If you are considering buying or selling any financial instrument, we urge you to seek qualified investment advice before proceeding.

Late-Breaking News: Nasdaq takes action to help companies remain listed:

http://www.nasdaqnews.com/news/pr2001/ne_section01_278.html

References

http://www.360networks.com/News_Releases_Details.asp?ID=139 ("360networks Announces Delisting From the NASDAQ Stock Market...")

http://ardentcomm.com/news/news_01-05-24.htm ("CAIS Internet Receives Notice of Noncompliance from NASDAQ")

http://www.covad.com/companyinfo/pressreleases/pr_2001/082701_press.shtml ("Covad Communications Group, Inc. Files Plan of Reorganization and Disclosure Statement")

<http://biz.yahoo.com/bw/010720/0015.html> ("Covad Common Stock to Move to Over-the-Counter Bulletin Board")

<http://www.eli.net/media/releases/2Q2001.shtml> ("Electric Lightwave, Inc., Reports 2001 Second-Quarter Financial Results")

<http://www.psi.net/news/pr/01/apr23.html> ("PSINet Announces NASDAQ Delisting")

<http://www.psi.net/news/pr/01/june1.html> ("PSINet Files For Chapter 11 in the U.S. ...")

<http://www.wsj.com/public/sn/y/SB997458626320217691.html> ("RhythmsNet Connections to Close, Leaving DSL Clients in the Lurch" ... available only to subscribers)

<http://www.winstar.com/press/2001/templ.asp?fileid=0418011> ("Winstar Files Voluntary Chapter 11 Petition")

<http://www.winstar.com/press/2001/templ.asp?fileid=0425011> ("Winstar Announces NASDAQ Delisting")

What Vital Security Lessons Can



John Kemp
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The good news is that the initial variants of CR were for the most part nondestructive. The bad news is that the next time your machine is compromised you may not even know it.

In mid-July, yet another new Internet worm made headlines. Known as “Code Red” (CR), this worm is code that infects one machine and then propagates over the network attempting to infect others, leveraging a vulnerability in Microsoft’s Internet Information Server (IIS) webserver software.

How CR works. The CR attack takes the form of a buffer overflow against the IDQ.DLL, which is reached through a script mapping for “.ida” or “.idq” files, a component of the IIS web indexing services. The overflow allows attackers to gain system-level privileges on the infected machine. They can then perform any kind of malicious activity on that machine and continue to propagate to others.

The initial variant of CR was not intended to be extraordinarily destructive. It modifies the memory-resident homepage of the webserver, and at a specified date the code attempts to flood the site www.whitehouse.gov

Hidden hazards. Although the worm can be defeated by patching for the vulnerability and rebooting, its success gave it an unexpected and damaging side effect: some networks on which the worm was trying to propagate became saturated and experienced traffic slowdowns. The worm also revealed a number of shortcomings in certain types of networking equipment, particularly those that allow management through a web interface, and some of those devices failed in the face of the CR buffer overflow.

Worm variants. Since the initial release, a number of variants of the original CR worm have been crafted. These variants proved to be both more successful and more malicious than the original. According to CAIDA (the Cooperative Association for Independent Data Analysis), the first variant of the worm, called “Code-Redv2,” infected over 350,000 machines in less than one day.

In early August, another variant called “Code-RedII” appeared. This variant installs a modified version of the file “explorer.exe” on infected machines, and enables the remote attacker to regain system-level access to the machine at any time.

The success rate of infection by the CR worm and the incidental damage that it caused to networks raises some interesting issues about security and the Internet. Below are some general lessons one might learn from these incidents.

Security Is Only As Good As the Weakest Link

When exceptions are made in security policies, they can have serious consequences. For example, if an organization designed a complete network security system and installed a firewall to block incoming connections and filter out known attacks—but made *one* exception to allow Internet web queries to reach an unpatched IIS webserver behind the firewall—the entire security design would essentially become worthless.

Internet Worms Can Spread Quickly

Local estimates at the UO were that if you set up an IIS server on campus during the height of the attacks, that machine would be hit by the Code-Redv2 worm in less than an hour. And because of the way the worm chooses targeted IP addresses, once an internal machine on the network becomes infected, it would take even less time for a local machine to become infected.

Because of this, when installing a new machine it’s best to use another machine to obtain and store patches to a portable media, such as a CD-ROM. Then take the media and install the patches on the new machine *before* you connect the new machine to the network.

The Internet Can Be Unreliable

The Internet as a whole is generally considered to be reliable. There are often multiple network paths between major nodes, and dynamic routing is used to heal small-scale outages. In larger organizations a great deal of effort is expended to ensure that the equipment is well-built and that the power infrastructure supporting the network is robust.

But it is important to remember that any particular segment of the Internet may not be bulletproof. “Denial of Service” (DoS) attacks against specific targets have been successful in a number of cases. And in the case of CR—because of poorly designed interfaces on some networking gear, or the large volume of traffic during the attack, or

We Learn from Code Red?

inadequate capacity—some parts of the Internet were severely impacted.

The Latest Attack Techniques Are More Sophisticated

One notable technique demonstrated by the CR worm is that IIS is a good target. In the past, buffer overflows have been one of the most common forms of attack against UNIX machines. It is interesting to see that this method is now being used against Microsoft OS machines as well. Because of current software coding practices, and because of the size and complexity of large packages (like IIS), finding a solution for the generalized problem of buffer overflows is not going to be easy.

Another interesting technique that the CR worm exhibits is that it is a memory resident program. This means that a machine could fall victim to the CR attack, but there might be no evidence of changes left in the filesystem of the machine.

One could easily imagine a more cleverly crafted worm that does not leave behind the other incidental footprints that CR does. Indeed, there are already a number of backdoor programs targeting other operating systems that subvert normal system calls in such a way that they become virtually undetectable to the local administrator.

The good news is that the initial variants of CR were for the most part nondestructive. The bad news is that the next time your machine is compromised you may not even know it.

Administrators Are Sometimes Asleep at the Wheel

While I think UO administrators performed fairly well in the face of the attack, the most disappointing aspect of the recent CR incidents is the failure of the system administrator community at large to address the problem in a timely fashion.

Warnings about CR were given through numerous channels, and yet many administrators failed to apply patches to their systems. It may be possible that many machines are running with no administration whatsoever. It's also possible that some administrators are not paying attention to security warnings. Or, worse yet, it could be that some administrators simply don't feel it is important to apply patches until the damage to their systems reaches a critical level. Whatever the case, CR did not show system administrators in a positive light.

Related References

For more details on worms and network security, see the following web pages:

- <http://www.cert.org/advisories/CA-2001-13.html>
- <http://www.cert.org/advisories/CA-2001-19.html>
- <http://www.cert.org/advisories/CA-2001-23.html>
- <http://www.eeye.com/html/Research/Advisories/AL20010717.html>
- <http://www.eeye.com/html/Research/Advisories/AL20010804.html>
- <http://www.caida.org/analysis/security/code-red/>



photo ©2001 Cisco Systems, Inc.

Cisco 675 DSL Router Users Should Upgrade to A Current Version of CBOS

Code Red vulnerability spurs need to upgrade

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Director, User Services and Network Applications

It became apparent during the recent Code Red worm attack that some UO faculty, students and staff who connect via DSL with Cisco 675/678 DSL routers were experiencing a denial of service attack as a side effect of the worm's probes.

Technical details concerning this vulnerability are available online at

<http://www.cisco.com/warp/public/707/cisco-code-red-worm-pub.shtml>

If you use a Cisco 675 / 678 DSL router, you should strongly consider upgrading the firmware that runs on your DSL routers to the most recent version of the Cisco Broadband Operating System (CBOS).

Details about how to do this can be found online at <http://www.qwest.com/dsl/customerservice/coderedvirus.html>

Watch Out for Microsoft Passport Security Woes

Trojan Horse viruses can easily compromise Passport on Windows 95/98 and ME systems

Passport, the authentication program used by millions of people logging into Hotmail accounts, unfortunately puts many Windows users at risk by requiring the use of a single username and password for all participating websites. An added vulnerability is that redirection of browsers to Microsoft's Passport server is not protected by Secure Sockets Layer (SSL), making it easy for user account numbers and other sensitive information to be intercepted.

One of Passport's most potentially damaging flaws is that Windows 95/98 and Windows ME expose usernames, passwords, and phone numbers used to access the Internet service provider for as long as ten minutes, making them vulnerable to theft or infection by a Trojan Horse virus. Windows NT, 2000, and XP guard against this, but there are still millions of Windows 95/98 and ME users who are wide open to attack.

Researchers at AT&T Labs detected these vulnerabilities during testing with the free "bugtoaster" utility, which may be downloaded from <http://www.bugtoaster.com>. For an exhaustive report of Passport's potential problems, see the AT&T Labs white paper at <http://www.avirubin.com/passport.html>

Gartner Group Recommends Alternatives to Microsoft IIS

Web administrators running Microsoft IIS webserver may want to read John Pescatore's Gartner Group Advisory at

http://www.gartner.com/DisplayDocument?doc_cd=101034

Pescatore recommends that enterprises seeing Code Red and Nimda attacks immediately investigate webserver alternatives to IIS such as Apache.

'Blackboard' Service Offers Web Teaching and Learning Environment

Instructors looking for a web teaching and learning environment for their classes at the University of Oregon should know about Blackboard, a service offered and supported by the UO Library.

More information about Blackboard is available online at <http://blackboard.uoregon.edu/>

Some BlackICE Directory Files Can Trigger False Code Red Alert in Norton

Don't worry, this minor glitch can easily be resolved

Recently we've had some reports of campus Windows servers getting Code Red alerts from Norton even though they're protected by BlackICE Defender, the personal intrusion detection program that automatically locks out sites when it senses an attack.

BlackICE technical support confirmed that these alerts are "false positives," caused by .enc files in the BlackICE directory that contain enough of the packet information in Code Red to trigger a false alert in Norton, e.g.:

```
evd20010829-16 .enc
evd20010816-18 .enc
evd20010821-23 .enc
evd20010822-21 .enc
evd20010716-20 .enc
```

The information in these .enc files can't infect your system, and you can delete them without affecting BlackICE's ability to protect you.

Another option is to exclude these files from a Norton scan altogether. Or, you can instruct BlackICE not to create these files by taking the following steps:

1. Select "Tools" from the menu bar.
2. Choose "Edit BlackICE Settings."
3. Click on the "Evidence Log" tab and make sure the box labeled "Logging enabled" is *not* checked.
4. Click "OK."

This will turn off the evidence logging feature in BlackICE.

For more information on BlackICE and other Internet Security Systems products, go to <http://www.networkice.com/>

'Nimda' Virus Targets Windows Systems, Internet Information Servers

Nimda is the first worm to modify existing websites and offer infected files for download

Joyce Winslow

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On September 18, TruSecure Corporation sensors detected a new worm, dubbed Nimda W32.nimda.a.mm, as it attempted to infect Windows NT and 2000 servers and Windows 95/98/ME/NT/2000 machines worldwide.

Nimda is the first worm to use normal end-user machines to scan for vulnerable websites. The virus spreads by sending infected emails, creating an open network share on the infected computer and attempting to copy itself to unpatched Microsoft Internet Information Server (IIS) systems. It commonly appears in an email without a subject line and contains an attachment titled, "readme.exe". Users visiting compromised web servers may inadvertently download an Outlook Express email file (.eml) that contains the worm as an attachment.

Once Nimda infects a machine, it tries to replicate in one of three ways:

- via email, using addresses stored in email programs
- via IIS web servers, exploiting the same known software vulnerability that was attacked by Code Red (see article on page 22)
- via shared disk drives

While the worm does not destroy data, it can markedly slow or disrupt computer operations because it is so pervasive and spreads so rapidly.

How to Protect Yourself

There are several steps you can take to protect yourself from virus contamination:

1. Install and update antivirus software
2. Download the antivirus software patches

Free patches for both the IIS vulnerability and the MIME Outlook Express email exploit are available at <http://www.microsoft.com/technet/security/bulletin/MS00-078.asp> and

<http://www.microsoft.com/technet/security/bulletin/MS01-020.asp>

3. **Don't open unknown email attachments!** *Everyone*—especially those who use Outlook or Outlook Express—should take care not to open attachments they're not expecting.

4. Turn off Javascript and auto-preview in your browser's Preferences folder under the Edit menu:

Internet Explorer 5: Open Edit -> Web Browser -> Java and make sure "Enable Java" is unchecked

Netscape 6: Open Edit -> Preferences -> Advanced and uncheck all the Java options

Netscape Communicator 4.7: Open Edit -> Preferences -> Advanced and uncheck all the Java options

Note: Microsoft recently released a IIS lockdown tool that will secure even an unpatched IIS server against many common attacks. For details, see

<http://www.microsoft.com/technet/treeview/default.asp?url=/technet/itsolutions/security/tools/locktool.asp>

References:

- Symantec's information on Nimda, with complete instructions on how to remove it:

<http://www.sarc.com/avcenter/venc/data/w32.nimda.a@mm.html>

- F-Secure's virus descriptions page:

<http://www.f-secure.com/v-descs/nimda.shtml>

- Microsoft's information page:

<http://www.microsoft.com/technet/treeview/default.asp?url=/technet/security/topics/Nimda.asp>

- Frequently asked questions regarding Nimda vulnerability and the patch:

<http://www.microsoft.com/technet/security/bulletin/fq00-078.asp>

- UO Departmental Computing Group mailing list's discussions about Nimda solutions for server administrators:

<http://darkwing.uoregon.edu/~consult/deptcomp/2001/datelists.html>

- The FBI's National Infrastructure Protection Center (NIPC) advisory on potential denial of service attacks:

<http://www.nipc.gov/warnings/advisories/2001/01-021.htm>

looking for network stats?

If you'd like updated reports on the flow of Internet traffic around the world or a daily average of Internet statistics, check out the following websites:

- The Internet Traffic Report: <http://InternetTrafficReport.com>
- Matrix Net's State of the Internet: <http://average.miq.net/index.html>

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 wide 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. **Unless otherwise indicated, prerequisites are required.** 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
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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 IN EARLY DECEMBER

Web Publishing, Multimedia ✓ 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

Wed Oct 17	10 - 11:50am	144 Knight Library	Frantz
Tue Oct 23	2 - 3:50pm	144 Knight Library	Michel

Web Publishing II - ★✓*Prerequisites:* Web Publishing I or equivalent knowledge and skills, and a web page you've created

Wed Oct 24	10 - 11:50am	144 Knight Library	Nesselroad
Tue Oct 30	2 - 3:50pm	144 Knight Library	Benedicto

Web Publishing III - ★ ✓ *Prerequisites:* Web Publishing II or equivalent knowledge and skills

Wed Oct 31	10 - 11:50am	144 Knight Library	Bell
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Dreamweaver I ✓*Prerequisite:* Web Publishing I & II or equivalent knowledge and skills

Wed Nov 7	10 - 11:50am	144 Knight Library	Johnson
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Dreamweaver II ✓*Prerequisite:* Dreamweaver I and Web Publishing III or equivalent knowledge and skills

Wed Nov 14	10 - 11:50am	144 Knight Library	Johnson
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Shooting Great Digital Images Wed Oct 17 2 - 3:50pm Studio A Knight Library Kirkpatrick

Intro to Digital Video ✓*Prerequisite:* Shooting Great Digital Images recommended

Wed Nov 7	3 - 4:50pm	267B Knight Library	Heerema, Howell
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Communications and Research Software ✓ Prerequisites

EndNote/ProCite (New this term: now you can connect to the UO Library catalog and transfer citations directly)

Mon Oct 8	3:30 - 4:50pm	235 Knight Library	Lenn
Mon Oct 15	3:30 - 4:50pm	235 Knight Library	Lenn

PowerPoint Basics (Applicable to both Windows and Macintosh)

Thu Nov 1	2 - 3:50pm	267B Knight Library	Heerema
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More PowerPoint ✓*Prerequisite:* PowerPoint Basics or equivalent knowledge and skills

Thu Nov 15	2 - 3:50pm	267B Knight Library	Heerema
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Net a Job: Use the Web! ✓*Prerequisite:* Familiarity with a graphical web browser

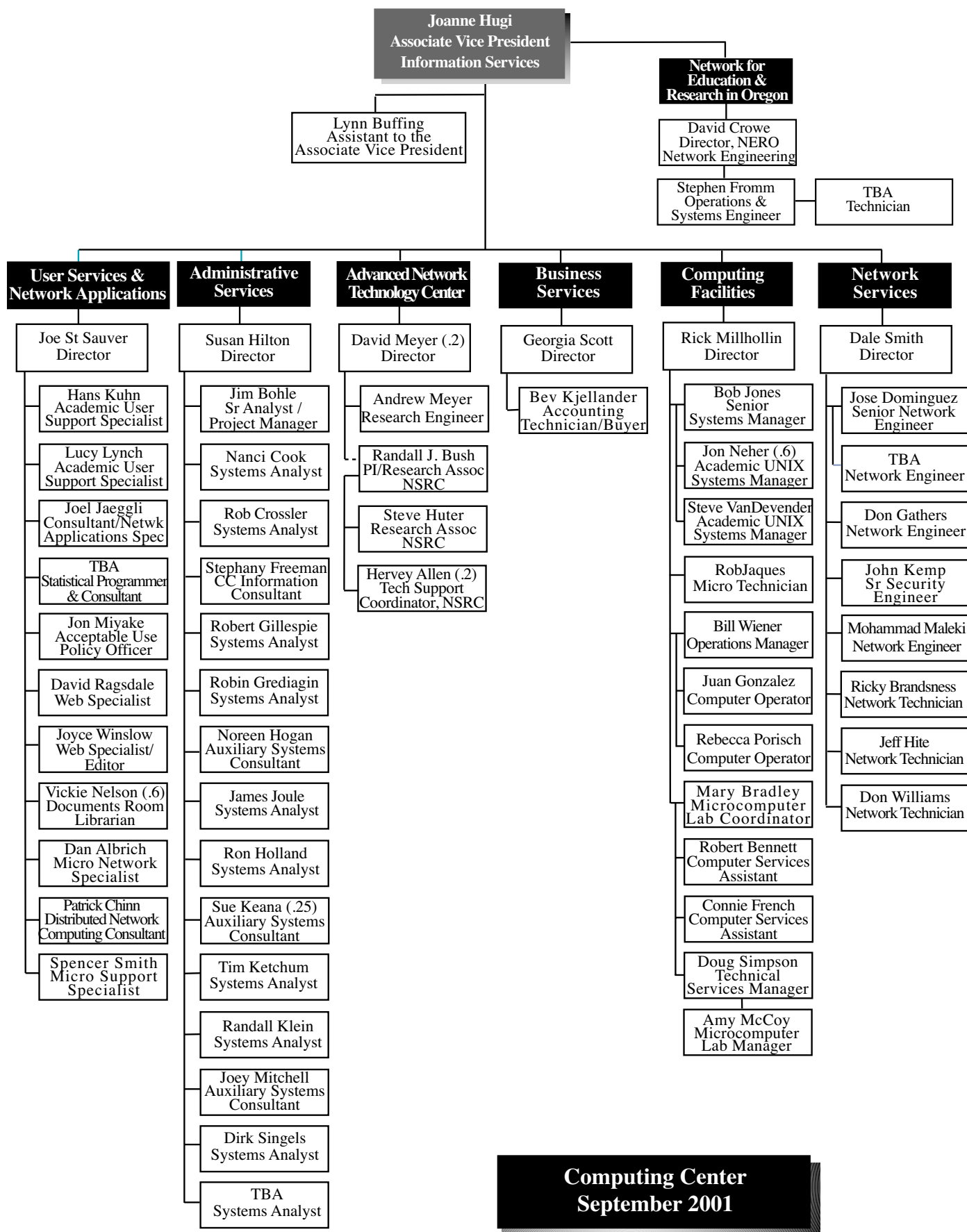
Thu Nov 29	2 - 3:20pm	144 Knight Library	Haynes
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PsycINFO ✓*Prerequisite:* Familiarity with a graphical web browser

Thu Sep 27	7 - 7:50pm	144 Knight Library	Benedicto
Fri Sep 28	3:30 - 4:20pm	144 Knight Library	Benedicto
Wed Oct 3	7 - 7:50pm	144 Knight Library	Benedicto

★ Requires an active account on Darkwing or Gladstone

Computing Center Organization Chart



**Computing Center
September 2001**

COMPUTING CENTER GUIDE

UO Website

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

Computing Center Website

<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@lists.uoregon.edu

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

Documents Room Library (Room 175 Grayson Hall)

346-4406

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

Large Systems Consulting

(Rooms 225-239 Computing Center)

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

346-1758

consult@darkwing.uoregon.edu

consult@gladstone.uoregon.edu

consult@oregon.uoregon.edu

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

Electronics Shop (151 Grayson Hall)

For computer hardware repair, installation, and upgrade services, call **346-3548** or write hardwarehelp@oregon.uoregon.edu. Also see 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

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

Computing Center Hours

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

Grayson Building Hours*

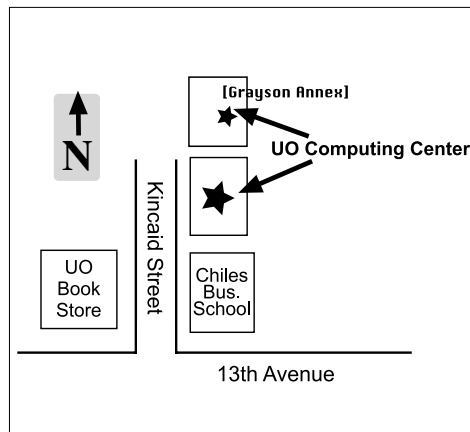
Monday - Thursday 7:30 am - 11:30 pm

Friday 7:30 am - 7:30 pm

Saturday 9 am - 9:30 pm

Sunday 9 am - 8:30 pm

* Note: These are building access hours; hours for individual facilities may vary.



COMPUTING NEWS
UO COMPUTING CENTER
1212 UNIVERSITY OF OREGON
EUGENE, OR 97403-1212