University of Oregon

COMPUTING NEWS

WINTER 2000

IN THIS ISSUE...

Darkwing, Gladstone Software Upgrades Continue

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Computing Center systems staff continues to upgrade Darkwing and Gladstone software throughout the year. A few recent additions are described briefly below.

G77. G77, a GNU FORTRAN 77 compiler, is now available on Darkwing and Gladstone. G77 is based on gcc, the GNU C compiler, and provides an alternative to the Sun FORTRAN compiler. You can see the man page for g77 by typing

```
% man g77
```

Netscape 4.7. The latest version of Netscape has been installed on Darkwing and Gladstone for the benefit of X-terminal users. Encryption capabilities were improved with Fortify, a program that provides worldwide, full strength, 128-bit cryptography to users of Netscape Navigator (versions 3 and 4) and Communicator 4. The Shockwave Flash plug-in was also installed for multimedia viewing.

To learn more about Fortify for Netscape, see **http://www.fortify.net**

Berkeley DB2.7.7 This database library has C and perl interfaces. For more information, see

http://www.sleepycat.com

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COMPUTING CENTER

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Documents Room Adds New Training Videos

The new collection offers software training for all levels, from beginning to advanced

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The Computing Center's Documents Room library has recently added a number of new videos to its collection. The new titles cover Microsoft Office 2000 (Word, Excel, Access, Outlook, and PowerPoint), Netscape Communicator, PhotoShop 5.5, and web searches. Most of the videos come in sets and offer training geared to the beginning, intermediate, and advanced learner.

The new videos expand the Documents Room video collection, which already included workshops on popular programs such as Office 97, PageMaker, DreamWeaver, HTML, JavaScript, and FrontPage.

Videos circulate for one week and are renewable. For a partial list of videos available in the Documents Room, check out **http://darkwing/~docsrm/video.html**

For a complete list, stop by the Documents Room, which is located in Room 205 of the Computing Center (phone **346-4406**).

Portland Hosts Supercomputing Conference

SC99, the leading supercomputing conference in the world, draws high-tech participants to Portland

SC99, the annual conference of high-performance networking and computing, attracted a record number of participants to the Oregon Convention Center in Portland last November. Over 5,000 people attended the conference, which is sponsored by the IEEE Computer Society and the Association for Computing Machinery.

The conference featured three days of technical presentations, as well as awards presentations and exhibits. One of the highlights was a special session on the future of high-performance computing, including a demonstration of the first-ever cluster based on Intel's IA-64 Itanium™ processor. This processor was designed to provide the scalability, floating-point performance, and architectural features that the high-performance computing market and e-Business applications will need in the 21st century.

Each year the conference constructs a special on-site network environment that exists only for the duration of the conference. According to OSU computer science professor Cherri Pancake, who chaired this year's event, SCinet "was definitely the hottest network on the planet. It had more capacity going out from the convention center to the rest of the world than all the networks in Washington and Oregon combined." This year SCinet ran an internal fiber optic network using DWDM (Dense Wave Division Multiplexing) gear from Nortel Networks. It provided up to 16 channels operating at either 2.4 Gb/s (OC-48) or 10Gb/s (OC192).

Conference participants gather under the unique rotating pendulum in the Convention Center foyer.

Kudos...

Joanne Hugi Elected to EDUCAUSE Board

Computing Center director Joanne Hugi was recently elected to the board of EDUCAUSE, the international association dedicated to promoting information technologies in higher education. She is one of three new board members whose term began on January 1, 2000.

EDUCAUSE programs include professional development activities, print and electronic publications, strategic/policy initiatives, research and development, and a wealth of online information services. Current membership includes more than 1,600 colleges, universities, and education organizations and more than 150 corporations. For more information about EDUCAUSE, see

http://www.educause.edu/

Computing News Wins Award

Computing News was recognized as one of the top three university computing newsletters in the U.S. and Canada at the annual ACM/SIGUCCS convention in Denver, Colorado, last fall. Other winners were the University of British Columbia's *Into IT*, which took first place, and New York University's *Connect Magazine*.

The entries were judged on content, design, and effectiveness in getting information to the campus community.

ACM, an acronym for the Association of Computing Machinery, is one of the oldest and most respected academic computing organizations in the country. SIGUCCS is its Special Interest Group for University Computing Center User Services.

Did You Know...?? Some Tips

Computing Center staff has compiled some facts and tips about help you take full advantage of your computing opportunities,

WebMail

You can read your email on OREGON, DARKWING or GLADSTONE via your web browser. To find out more, see
https://webmail.uoregon.edu/

We encourage all WebMail users to take advantage of the program's ability to run in a secure (encrypted) mode. You can toggle between secure and regular mode by clicking on the key link near the bottom of the initial login screen.

Note: We generally recommend that you pick—and stick with—a single email client. For example, those who attempt to use Pine *and* Eudora *and* WebMail are asking for trouble because some mail clients move messages around as they're read.

New Online Directory

The UO has a new online directory service. To locate the email addresses and phone numbers of people on campus, see **http://directory.uoregon.edu/**

CD-ROM Service

Do you ever wish you could save a copy of your data or your documents on CD-ROM? You can! A workstation equipped to create CD-ROMs is available in Room 202 of the Computing Center. Blank CD-ROMs are also available for $2 each.

Remember that copyrighted materials (e.g., commercial software and copyrighted musical CDs) cannot be reproduced without written permission from the copyright holder. The CD-ROM burner is also not intended to be used for making multiple copies of material.

Proxy Server/Web Cache

You can speed up your web browsing—and help us conserve network bandwidth at the same time—by using the university's proxy server/web cache. For more information about how to use it, see
http://proxy.uoregon.edu/

Mailing Lists

Did you know you can create a mailing list for your class or group at the UO? For more information, see
http://cc.uoregon.edu/mailinglists/

SCP: Secure Copy

Many of you are already in the habit of using *ssh* ("secure shell") instead of Telnet when you connect to Darkwing, Gladstone, the Alphacluster or the VMScluster—that's great!

However, if you're using FTP to transfer files to those systems, you're still vulnerable to password-sniffing because FTP transmits your password openly, just like Telnet. To avoid this hazard, begin using SCP instead of FTP to transfer files.

For example, assume you're user **jsmith** and you want to copy the file **xyz.dat** from your **field data** subdirectory on Darkwing to your current directory on your UNIX desktop. To do that, you'd type

```
% scp jsmith@darkwing.uoregon.edu:fielddata/xyz.dat xyz.dat
```

At the password prompt, type in your password. The file will be copied and you'll get some information about the speed of the transfer. You can also copy files from your current UNIX desktop directory to your Darkwing account, e.g.,

```
% scp abc.txt jsmith@darkwing:archives/abc.txt
```

IP/TV: Quality Video Online

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 1999 PC Duckware. If you're on a PPro/Celeron/PII/PIII PC running Windows 95, 98 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.

(Sorry, no Macintosh version is available at this time.)

on Computing at the UO

computing at the University of Oregon that you may not be aware of. To services, and policies, here's a quick overview:

@HOME Cable Modem Service

@HOME cable modem service isn't available in all neighborhoods yet, but it 's coming soon. For more information, see the ATT/TCI web page at

http://www.tci.net/home.html

Get Your Web Site Noticed

Do you ever feel your web site isn't showing up as well as you'd like in the campus search engine? If so, here's a checklist of dos and don'ts to help you correct the problem:

- **Avoid frames, Java, Javascript, or other scripting languages** (the version of Altavista we run locally doesn't support frames, Java, Javascript or other scripting languages)
- **Link all your pages either from your top-level page, or from a page that is linked to your top-level page**. (We seed Altavista only with user top-level pages.)
- **Avoid structuring your pages with many levels of subdirectories.** Altavista assumes that pages way down in a subdirectory are less important than pages at or near the top of a directory.
- **Use meta tags.** If you're in the dark about how to do this, see the information at

  http://search.uoregon.edu/cgi-bin/query?pg=h#meta

- **Periodically update your pages.** Altavista prioritizes page revisits based on how frequently the pages seem to change
- **Use file extensions consistently.** That is, if a web page is an HTML document, use the normal **.html** extension (don't call it **.jpg** or **.gif**, for example). Likewise, a subdirectory should *not* have a name that ends in **.html**.

Modem Dialin Limits

As you've probably noticed if you dialin to UOnet via modem, the UO has a limited number of modems—and a large number of users who need to use them.

Please do your part to make that limited resource serve as many users as possible. Limit your use of the university dialin lines to no more than a couple of hours a day, or 14 hours over the course of a seven-day period.

If you routinely need more dialin time than that, you should obtain a dialin account with a commercial Internet service provider, or work from on campus. For a list of Internet service providers, see

http://www.thelist.com/

You Can Use 'Vacation' Email Response While You're Away

While you're away, you can set up an automatic response to incoming email by using the "vacation" program on Darkwing/Gladstone. To set it up, type

```
% vacation
```

and answer the questions that appear.

Note: On Darkwing, the default editor is **vi**. If you'd prefer a simpler editor, you may want to set your editor to **pico** before initiating the vacation program. To do this, type

```
% setenv VISUAL pico
% setenv EDITOR pico
```

and then enter the vacation program by typing:

```
% vacation
```

Note: There isn't a supported vacation program on Oregon.

Read Computing News in PDF Format

If you lose or misplace your copy of our newsletter, you can read it online at **http://cc.uoregon.edu/cnews/**

Each issue is available in PDF format, and you can also reference back issues at

http://cc.uoregon.edu/cnews/backissues/

Technology in Education...

New 'Virtual Language Lab' Sharpens Students' Skills Outside the Classroom

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Utilizing a new "Virtual Language Lab" (VLL) introduced last fall, UO students taking first-year French, German, Italian, Japanese, or Spanish can now do their homework online at

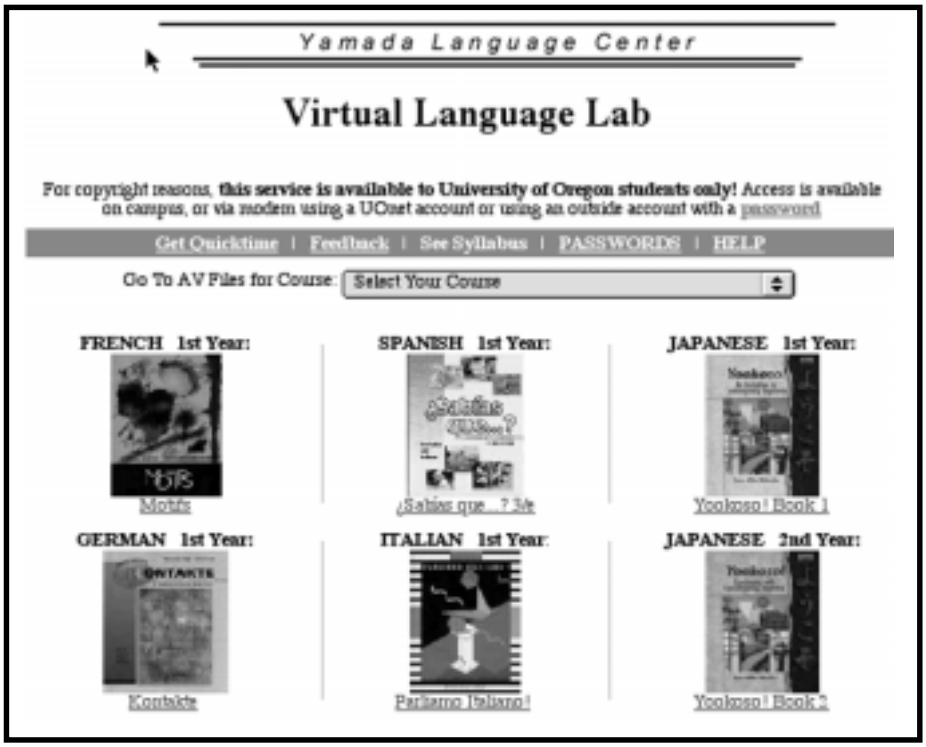
http://babel.uoregon.edu/YLC-AV/

One of VLL's great advantages is that it's accessible 24 hours a day, so students can do their homework at their convenience. It can also serve up to 2000 users simultaneously.

The lab, which employs digitized content from CDs and tapes, is the work of the Yamada Language Center's director, Jeff Magoto, and GTFs Ginny White and Bryan Chaney.

Jeff conceived the basic design, obtained copyright permissions, and established the procedure for turning tapes and CDs into digital content; Ginny put together the lessons' database and published them on the web; while Bryan digitized the material, configured the server, parsed the lessons, and tested for bugs. Since then, more staff members have been added to keep up with the workload. Approximately $8000 in Educational Technology funds paid for the lab's equipment (server, software, and networking upgrades), and Yamada Center fund donors contributed $3000 for staff salaries.

Recordings for each class are delivered over the web as QuickTime files, and, for copyright reasons, access to these files is restricted to UO students. To reach the Virtual Language Lab, students need a connection to the campus network (UOnet) and—if they're dialing in using a private Internet service provider like AOL or EFN—a password that's either arranged with their instructor or obtained, with proper student ID, from the Yamada Language Center.



Home page of the Virtual Language Lab at ***http://babel.uoregon.edu/YLC-AV/***

In its initial phase, the lab was designed to cut the costs involved in providing language tapes to each individual student, as well as offer more flexibility for learning. Instead of having to come into the Yamada Language Center lab in 121 Pacific to do their homework, students can access the Virtual Lab's web site at their convenience, using their manual to follow along with the spoken lesson.

This is only the beginning. Yamada's vision for the future is total immersion. In the words of director Jeff Magoto, the virtual lab of the future will be "a multi-user environment that not only *looks* like a Paris café, but lets you sit down and experience the foreign language in non-passive ways." In addition, the future lab would "know something about your abilities, the kinds of skills you need / want to work on, and would provide you with lots of choices." In the meantime, a couple of intermediate steps are planned: first, to expand to second-year languages and incorporate instructors' own materials online; and next, to include video programming, such as rebroadcasts of lectures and the YLC's satellite content.

To learn more about the Yamada Language Center's innovative learning services (including a self-service language program, free tutoring exchange program, and daily foreign-language news broadcasts from 30 countries), visit their web site at

http://babel.uoregon.edu/

Windows 2000: A Sneak Preview

Should you upgrade? Our short answer to this question is 'Not yet.'

Hervey Allen
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As we go to press, Windows 2000 is expected to be released on February 17, 2000. While it's possible this date may change, the final release of Windows 2000 is imminent.

What will this mean to you? This article attempts to answer that question.

Should You Upgrade?

The first question most people will have is, "Should I upgrade to Windows 2000?" Our short answer to this is, " No, not at this time."

Currently, it's not clear whether Windows 2000 will automatically be installed on new machines shipped in the first half of 2000.

Last fall, Microsoft publicly admitted that Windows 2000 was not designed for the average home user—or even many corporate desktop users. The client version of the product, Windows 2000 Professional, requires a bare minimum of 64MB of RAM and (realistically speaking) a 300 Mhz Pentium II. For all practical purposes, you'll need 128MB of RAM and a Pentium II 450Mhz machine if you want to run new applications like Office 2000.

On the plus side, Windows 2000 does appear to be quite a bit faster and more stable once applications are running.

New Server Versions

There are three other Windows 2000 flavors, all are server versions. These include Windows 2000 Server (supports up to four processors in one machine), Windows 2000 Advanced Server (up to 8 processors), and Windows 2000 Enterprise Server (up to 32 processors).

Advantages for large networked groups. In some cases, you may wish to run Windows 2000 if you belong to a networked workgroup that has a Windows 2000 server.

There are considerable advances in the control, sharing, and access of resources that can be put together for workgroups, or large networks, that take advantage of Windows 2000 Server and Windows 2000 Professional products working together. Much of this relies on a new network directory methodology called "Active Directory" that Microsoft implemented in Windows 2000.

Windows 2000 servers and the UO's networking environment. At the University of Oregon we have a decentralized networking environment that makes it quite difficult to follow the Microsoft model of sharing network resources.

To better understand how Windows 2000 will—and will not—mesh with our current networking scheme, Computing Center and departmental support personnel are working together to prepare to use Windows 2000 in the UO's networking environment.

What's the Likely Upgrade Path of the Future?

For those who are interested, Windows 2000 was originally known as Windows NT 5.0. The product looks very much like Windows 98 with some minor interface changes. But setting options and machine configuration have changed dramatically—in fact, they've actually become much more complex. Our beta testing has found that network settings, network interaction, dialin setup, and hardware configuration are dramatically different and *much* more involved. *For this reason, we're not recommending Windows 2000 for the novice user.*

A simpler 'consumer' version? As of December, 1999, Microsoft began public beta testing of their new "consumer" Windows version, currently codenamed "Millennium." This product will likely be the upgrade path for most home and corporate users sometime in the next year.

Wait and see. During the course of the year, it should become apparent if Windows 2000 will be the next upgrade path or if most Windows 95/98 users will be upgrading to the Microsoft "Millenium" product first and Windows 200x in the future. Microcomputer Services staff recommends that most users simply wait and see where things fall.

If you have further questions about Windows 2000, feel free to contact Microcomputer Services (**346-4412**; *microhelp@oregon.uoregon.edu*). Or, if you prefer, you can stop by Computing Center Room 202 from 9am to 5pm, Monday through Friday.

Windows NT Users: Service Pack 6a Now Available

If you have a machine running Windows NT, you should give strong consideration to installing Microsoft's newly released Service Pack 6a.

As always, we recommend that you make a clean backup of your system before doing any upgrade, just in case you experience unanticipated post-upgrade problems.

For more information about this product, see

http://www.microsoft.com/ntserver/nts/downloads/recommended/SP6/allSP6.asp

Using 'WinModems' — a No-Win Situation?

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Because they're so inexpensive, so-called "WinModems" have recently become very popular.

While the name "WinModem" is specific to the US Robotics/3Com brand, it's become the vernacular for all internal, host-based modems (i.e., modems that use software and a machine's CPU to emulate a standard modem's hardware).

Unfortunately for most users, however, WinModems are far from trouble-free. Reported problems include modems that

- disappear from the System Control Panel
- don't connect
- connect to some providers but not others
- drop connections after a short period of time
- are incompatible with some motherboards or the machine's Basic Input Output System, or BIOS
- perform poorly
- break when you upgrade your Windows Dial-Up Networking software (e.g., when you upgrade from version1.2 to 1.3)
- require complex setup steps, such as editing the registry and moving slots
- hog processor resources—sometimes to the point where the mouse skips when the modem is in use

Troubleshooting

Fixing internal modem problems is a dicey business. For one thing, if they fail, there are no connection lights to clue you in as to what's going on. And there are other drawbacks as well: WinModems can cause resource conflicts in older operating systems, and if they hang, you must reboot your machine to reset the modem (whereas external modems may be turned on and off independently).

What to do if your modem 'disappears'

If you're using a WinModem and are unlucky enough to have it vanish from the System Control Panel, here's a likely solution:

1. Go to the hidden **c:\windows\inf** directory. To see this directory, you may need to go to the View menu, choose "Folder Options...," click the "View" tab if one is present, and then check the option "show all files."

2. Search for the WinModem modem model number as a text string in each ".inf" file in this directory.

3. Rename the files that you suspect reference your WinModem. Don't use the ".inf" extension in the newly named file.

4. Go to the manufacturer's web site and find the latest driver/software files.

5. Reboot your machine (the modem should reappear in the Control Panel).

6. Install the modem's software from disk (*important!*). Each modem has a different method for installing its software. Be sure to read the manufacturer's ReadMe files to see how this should be done for your particular modem's brand and model.

Another possible solution is to pull the modem from its PCI slot and move it. In some cases, this will cause the modem to reappear in the Control Panel.

Summary

Our take on WinModems is that if you are computer savvy you can probably deal with problems that arise. If your CPU is fast enough, you probably won't notice a reduction in performance, and these modems are cheap—and even fast, in some cases.

If, however, you're an average user who doesn't want to be bothered with some of the potential headaches outlined above, you'd be better off choosing an external modem. For a trouble-free modem experience, we still recommend the US Robotics/3Com external 56K V.90 Sportster.

Questions?

If you have further questions or problems regarding WinModems, contact Hervey Allen (**346-4412**; *hervey@oregon.uoregon.edu*).

Calling All UO Scientists/ Researchers...

If you're a UO scientist or researcher who relies on the high-speed Internet2/Abilene network connections to conduct your work, please take the time to fill out the data submissions form at

http://www.ncsa.uiuc.edu/~esoriano/ClearinghouseProject/Query.htm

Use this form for updating existing information, or submitting new information about specific research Meritorious Applications/Projects that are supported by a National Science Foundation HPC award.

BubbleBoy: Another Virus Variation to Watch Out For!

The BubbleBoy virus is not a threat, but new viruses of this type are. Taking precautions is always a good idea.

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Last November, someone in Argentina sent a new type of computer virus to the Network Associates' McAfee Anti-Virus Center in the United States.

The new virus, called BubbleBoy, is unique in that it exploits a feature of Microsoft Outlook in conjunction with Internet Explorer 5 (IE 5). If Internet Explorer 5 is installed and the user clicks on an email message in Outlook, Outlook Express, or Eudora Pro 4.2 with "Preview" turned on, the virus can execute even if the email message hasn't actually been opened.

This happens because of a security hole in IE 5. If you have installed IE 5 and use the email "preview" function in Outlook, Outlook Express, or Eudora Pro 4.2, programs can be executed without your knowledge.

Who is Vulnerable?

The BubbleBoy virus is considered to be extremely rare because it is located only in virus research centers. However, similar viruses are very likely to become more commonplace in the future.

Windows 98/2000 Users: All Windows 98/2000 users have *IE* 5 installed by default. If you use Windows 98/2000 in conjuction with Microsoft Outlook, Express, or Eudora Pro 4.2, you are vulnerable to this type of virus if you haven't updated your antiviral definition files or your IE 5 software.

Preventive Measures

Microsoft's patch. To avoid being vulnerable to IE 5's security problem, you can download a security patch from Microsoft at
http://www.microsoft.com/Security/Bulletins/ms99-032.asp

The IE 5 patch. If you use *Microsoft* Outlook products for email, or if you use Eudora Pro 4.2 under Windows with the preview pane turned on, you may want to consider downloading the IE 5 patch. We recommend getting the patch directly by downloading it from our local server at **ftp://public.uoregon.edu/** . Then open the links to Antivirus -> Other Utilities -> BubbleBoy and download the file **q240308.exe**

Note: You need this patch *only* if you are running Internet Explorer version 5 and use the preview functions of Outlook, Outlook Express, or Eudora Pro 4.2.

Antivirus updates. BubbleBoy is just one more reason why you may want to make a habit of updating your antiviral definition files on a regular basis.

The latest versions of Norton AntiVirus and other antiviral programs will catch BubbleBoy and similar viruses before they can execute and cause problems:

Norton AntiVirus. Norton AntiVirus makes updating easy through the LiveUpdate feature of the product. If you don't know how to use LiveUpdate, contact Microcomputer Services (**346-4412**).

McAfee. If you have a McAfee antiviral product you can update your virus definitions at any time by visiting
http://download.mcafee.com/updates/updates.asp

Email Worms Pose New Threat

Over the past few months, the number of worms that target or propagate via Microsoft Outlook (including Outlook Express) have increased dramatically. Several of these worms have payloads that may have already been activated. *It's critically important that you install and run some type of antiviral software and regularly update it. If you're using Outlook, this becomes even more important.*

Below is a list of the most current worms that either propagate via Outlook or affect Outlook users directly. Links to additional information are also provided:

W32.Mypics.Worm New and particularly nasty. Propagates only via Outlook and formats the hard drive. Payload delivery scheduled for any time in 2000.
http://www.symantec.com/avcenter/venc/data/w32.mypics.worm.html

Worm.ExploreZip(pack) Propagates by attacking all MAPI-capable email programs on Windows systems (including Outlook), then destroys all files containing any of the following extensions: **.h**, **.c**, **.cpp**, **.asm**, **.doc**, **.xls**, **.ppt**
http://www.symantec.com/avcenter/venc/data/worm.explorezip.pack.html

VBS.BubbleBoy (see article on this page) Propagates only via Outlook.
http://www.symantec.com/avcenter/venc/data/vbs.bubbleboy.html

W97M.Pri.Q/W97M.Prilissa.A Propagates only via Outlook and attacks Word documents.
http://www.symantec.com/avcenter/venc/data/w97m.prilissa.a.html

W97M.Melissa.U (Gen1) Propagates via Outlook only.
http://www.symantec.com/avcenter/venc/data/w97m.melissa.u.gen1.html

W97M.Melissa.AA Propagates via Outlook only.
http://www.symantec.com/avcenter/venc/data/w97m.melissa.aa.html

Coming Soon: Watch for New

Microcomputer Services, Computer Accounts, Documents Room, Electronics Shop,

Lynn Buffing
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North entrance to Grayson Hall, located across the courtyard from the Computing Center building.

In July 2000, when the renovation of Grayson Hall (the former Law School) is complete, several key Computing Center services will be moving across the courtyard to spacious new quarters. Microcomputer Services, Computer Accounts, Electronics Repair, and the Documents Room Library are among the existing services that will be housed in Grayson, as will several public access workstations and two new microcomputer labs.

Microcomputer Services: Microcomputer Services will be moving its entire operation to Grayson Hall. This group, which creates and distributes the UO's Duckware CDs, offers help with almost any personal computer-related question you may have—including connecting to the Internet, solving virus problems, setting up and troubleshooting computing accounts, and performing file recoveries and transfers.

The new Microcomputer Services area in Grayson will include a larger reception area on the first floor at the north end of the building, and new staff offices. In addition, space has been created for several multimedia stations that students, faculty, and staff may use to scan images, capture video, and manipulate large media files.

In its new Grayson Hall location, Microcomputer Services will be close to several large classrooms, new computer labs, the Documents Room Library, and the Electronics Repair Shop. By bringing these services closer together, we hope to offer improved consulting services to an expanded range of customers.

Computer Accounts: The administration of user accounts on the academic and administrative computers (Darkwing, Gladstone, and the VMScluster) and Oracle database systems will also move to the first floor of Grayson's north wing.

Computer services consultants will be available to assist users on account access and password questions and to process administrative requests for BANNER access and password changes.

Documents Room Library: The move to Grayson Hall will give the Documents Room Library more than twice as much space as it has now. In addition to providing space for its growing collection and increasing its accessibility to all patrons, the new Documents Room will include a small conference room, plenty of seating near windows overlooking the courtyard, and carrels where students can connect their laptops to the Internet.

Electronics Repair: The Electronics shop will continue to serve the campus with quality computer hardware repair and upgrades. Its convenient proximity to our other services will enable our new facility to provide faster lines of communication between technicians and reception staff.

The new reception area has been designed with customer convenience in mind, including increased storage for stocking cables and other supplies and

Computing Center Annex

and two new microcomputer labs to open on the first floor of Grayson Hall in July 2000

lower counter heights to facilitate equipment drop-off and pick-up. The facility will be located adjacent to a loading dock, which will expedite shipping and receiving, and we will have more 24-minute parking spaces, making it easier for customers to access our services.

Microcomputer Labs: The Grayson project has provided a unique opportunity to increase microcomputer lab access on the west side of campus. The Computing Center will operate an instructional lab with 20 Windows-based computers and an LCD projection unit. An open lab with drop-in access will be equipped with approximately 25 workstations with Windows and Macintosh computers, color scanners, and laser printers.

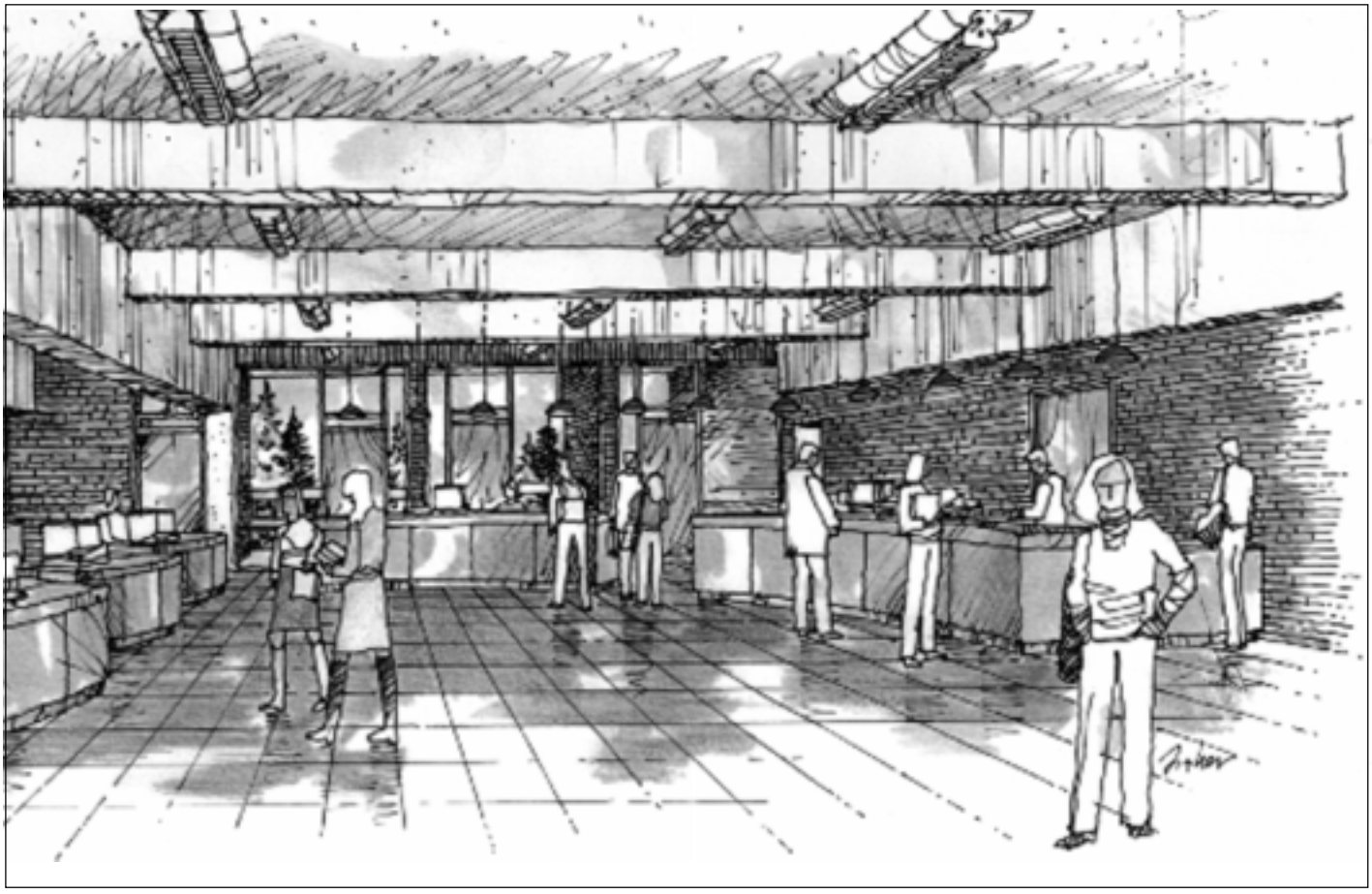
Faculty wishing to reserve the instructional lab for fall term 2000 should contact Mary Bradley (*mbradley@oregon.uoregon.edu*, **346-1737**).

Network Access: The Computing Center plans to use Grayson's spacious first-floor corridors to provide easy network access. Public access workstations will be installed in the corridors to allow students to check email or perform other system functions between classes. Network access will also be provided at the Cyber Cafe (an EMU-managed facility adjacent to the Documents Room).

In addition to the space allocated to the Computing Center, the Grayson renovation project will add approximately 1400 classroom seats to the university's classroom pool. Grayson will also house the departments of History and Ethnic Studies, the Social Science Instructional Lab, and the Oregon Survey Research Lab.

These renovations were made possible by gifts to the university, including $1,500,000 from Jeffrey and Susan Grayson and matching funds from the State of Oregon.

If you would like more information about this project, please contact Lynn Buffing (*lbuffing@oregon.uoregon.edu*, **346-1772**).



Artist's rendering of the Computing Center First Floor North Wing after the Grayson Hall renovation. The drawing gives a preview of our future consulting and reception areas.

UO and OAS Collaborate on Networking Workshop in Dominican Republic

The UO's relationship with the Dominican Republic dates back to the mid-nineties, when UO network engineer and Dominican Republic native José Domínguez helped create the first campus network at the Santo Domingo Institute of Technology.

Shortly thereafter, José served as architect and designer for the wide-area academic and scientific university network known as RUDAC, which interconnects four universities and the Dominican Republic's Higher Education Council. The RUDAC project, a cooperative effort between the Organization of American States and several universities in the Dominican Republic, also enlisted the international networking expertise of Randy Bush, Dave Meyer, and Radhames Mejía.

Computing Center network engineer John Kemp discusses advanced TCP/IP administration with a group of RUDAC engineers.

After the network was up and running, RUDAC's administrators and other local network engineers were eager for additional training. Their desire prompted a cooperative effort on the part of the UO-based Network Startup Resource Center (NSRC), the Organization of American States (OAS), Computing Center staff, and the technical staff at the Santo Domingo Institute of Technology (INTEC). Spearheaded by José, this coalition put together a four-day workshop in Santo Domingo last September.

In all, over 42 network engineers and network/systems administrators from several universities, the higher education council, and private industry attended the workshop, which was held at PUCMM (Pontifica Universidad Catolica Madre y Maestra). The event was funded by the OAS in collaboration with the NSRC.

NSRC representatives Steve Huter and Randy Bush coordinated background details, including the donation of technical books and CDs from O'Reilly and Associates and a loan of routing equipment from Cisco Systems. Network applications specialist Joel Jaeggli created CDs containing documentation and software used in the workshop. Computing Center director Joanne Hugi expedited the financial arrangements, four UO staff members (including José) shared their expertise, and INTEC's technical staff worked around the clock to make sure everything was set up for the event. In addition, many others at the UO, INTEC, and PUCMM worked behind the scenes on schedules, plane and hotel reservations, and making sure equipment arrived at the right place at the right time

José was responsible for the workshop's basic organization, coordinating the efforts of the Dominican Republic and UO crews and working behind the scenes to set up the technological infrastructure. He also taught three classes, covering basic TCP/IP protocols and addressing, domain name system configuration, and IP routing design.

Besides José, three other Computing Center support staff participated in the training effort: support specialists Hervey Allen and Lucy Lynch, and UNIX systems engineer John Kemp.

Hervey taught two sessions, the first on running Internet services under Windows NT Server 4.0; and the second, on organizing help desks to answer questions and assist with problems.

Lucy covered a range of web-related topics, including Apache web services, configuration, and Squid caching, as well as Internet mailing list management.

John's topics included advanced TCP/IP network administration, UNIX security, and network firewalls.

Workshop participants were enthusiastic about the event, as was OAS administrator Saul Hahn, who commented afterward that everyone is "clamoring to go back to Santo Domingo for the next workshop."

To learn more about the organizations involved in the RUDAC workshop, you can visit their web sites:

NSRC: **http://nsrc.org/**
RUDAC: **http://www.rudac.net.do/**
OAS: **http://www.redhucyt.oas.org/webing/**

Getting Netscape/IE Error Messages?

Encryption software has been upgraded, causing some incompatibility problems with older browsers

Hervey Allen
hervey@oregon.uoregon.edu

Now that it's the year 2000, an unfamiliar dialog box may pop up when you open your web browser. The dialog warns that "Certificate Authority Is Expired" when you try to access one of your site's secure pages. This is because web browser encryption software has been upgraded, causing some incompatibility problems with certain browsers.

If you use Netscape 4.05 or earlier, Microsoft Internet Explorer v. 4.01 or earlier for Windows, or *Internet Explorer* 4.5 and earlier for the Mac, you'll get the certificate expiration message when you open your browser. *Note that the security of your browser is not compromised by this message.* Once you continue past the dialog box, your browser will connect securely to the site without further interruptions.

Some people may want to upgrade their browsers to the latest version as soon as possible to avoid getting the expiration message. However, if you have an older machine, upgrading might not be an option. If you can't upgrade, or prefer not to, simply ignore the dialog box and proceed.

If you *do* choose to upgrade, here's what to do:

1. Microsoft Internet Explorer for the Macintosh: To upgrade, go to **http://www.microsoft.com/mac/download/en/default.asp** and follow the instructions. A patch for the Internet Explorer 4.5 problem will soon be available. See **http://www.microsoft.com/mac/iesecissue/**

2. Netscape Communicator 4.x: To upgrade, go to **http://home.netscape.com/computing/download** and follow the instructions.If you have a slower Internet connection, you may prefer to get Netscape 4.7 on CD. See **http://cd.netscape.com/4.7** for details. (Note also that version 4.6.1 is available on the 1999 Duckware CD-ROM.)

For complete information on upgrade tools and recommendations, see the Verisign web site at

http://www.verisign.com/server/cus/rootcert/webmaster.html

Y2K Patches Available for Novell Servers

Still have questions about Novell servers and Y2K? Read on...

Don Gathers
Network Engineer, Network Services
dgathers@ns.uoregon.edu

Many campus computer support staff have contacted me regarding Y2K patches for Novell servers. As you may already know, Netware 3.11 servers will not be Y2k compliant. Other servers can be made Y2K compliant, but they will all require patches. Here's a brief description of what's required for each:

Netware 3.12

Specific Y2K issues are addressed in the files contained in **312Y2Kp2.exe**. Before installing these files, all the latest patches/fixes must already installed on the server. There are approximately 64 individual files that need to be installed. These patches are available on the Network Services file server, Zeus. Log in as user **anonymous** and go to **\local\novell\312**.

Since this is the oldest version of Netware to be tested for Y2K compliance, it naturally is the most heavily patched. Instructions can be found on at **http://support.novell.com,** or you can contact me directly at **346-4316** (*dgathers@ns.uoregon.edu*).

Netware 3.2

3.2 was shipped as Y2K compliant, but one set of patches was released to improve the CLIB files. This CLIB patch **(lib312d.exe)** is the same one that must be applied to Netware 312. You'll find it in the 312 area on Zeus (see log-in instructions above).

Netware 4.10

For Y2K compliance on your Netware 4.10 server, you must install the latest patch level, **410pt8b**, plus the specific Y2K fixes found in **410Y2Kp2.exe**. These patches are available on the Network Services file server, Zeus. Log in as user **anonymous** and go to **\local\novell\410**.

Netware 4.11

For Y2K compliance on your Netware 4.11 server, you can either apply specific fixes in **411Y2Kp2** or use the latest patch, **nw4sp7a** These patches are available on the Network Services file server, Zeus. Log in as user **anonymous** and go to **\local\novell\411**.

Netware 4.2

4.2 was also shipped as Y2K compliant but requires a single set of patches to be truly compliant. The file is called **42Y2Kp1.exe**. This patch is available on the Network Services file server, Zeus. Login as user **anonymous** and go to **\local\novell\42**.

For additional Y2K information and more detailed instructions for applying these patches, see

http://support.novell.com

I have installed the patches on most versions of Netware and have not experienced any problems. If you encounter problems while applying any of these patches, please contact me at *dgathers@ns.uoregon.edu*

Who's Who at the

Vickie Nelson
vmn@oregon.uoregon.edu

A frequent feature of *Computing News*, our *Who's Who* staff profiles are designed to acquaint you with some of the people who work behind the scenes to facilitate your computing experience on campus.

As usual, our winter issue features a mix of brand-new and veteran staff members. Our new web specialist, Dave Ragsdale, joined us only last May, while Stephany Freeman, Don Gathers, and Tim Miller have been Computing Center employees throughout much of the past decade.

Dave Ragsdale
Web Specialist, Academic User Services

Meet the Computing Center's new web specialist, Dave Ragsdale. Dave, who also goes by the name Rags, brings over 15 years of media design and development to the job, including extensive experience in photography.

Born in Puerto Rico and raised in Phoenix, Arizona, Dave hopscotched between Arizona State University in Phoenix and the University of Arizona in Tucson before graduating with a B.S. in Industrial Design from ASU.

As part of his Industrial Design program, he took photographs of product models that he and other students designed, and discovered a calling in photography. With a partner, he started a photography business, specializing in product and fashion photography as well as weddings.

Dave took a job as staff photographer at ASU, continued to do photography on a freelance basis, and started working toward his Masters in Educational Media and Computers. In the early '90s he moved to Palo Alto for a multimedia position, where he developed his computer graphics skills further. Before coming to the UO, Dave was the multimedia-Internet development specialist at the University of Nevada in Reno.

Dave's wife Debbie, daughter Lindsey, 4, and son William, 2, have joined him in Eugene, along with his mother, who moved from Phoenix to spend at least a year near her grandchildren.

Stephany Freeman
Systems Analyst, Auxiliary Services

Born in Nebraska, Stephany Freeman moved around a lot as a child. Her family finally settled down in Oregon, and she finished her last three years of high school in North Bend on the Oregon coast. While earning her B.A. in Computer Science and Math at the UO, she held a job as a flight instructor and air taxi pilot.

After working five years at the UO College of Education as a research programmer, Stephany spent some time in local companies. She began work at the Computing Center in 1994, the same week she graduated with a Masters in Computer Science.

As a system analyst in Auxiliary Services, Stephany works with BANNER and is the Computing Center's primary support person for FIS, the university's financial information system. She enjoys her work and says there's always plenty to do: troubleshooting problems, adding new features, fixing identities, and helping make FIS as easy to use as possible.

Stephany and her partner of 14 years, Rick Brown, live in south Eugene. Another member of the family, Gemmy, a 14-year-old horse, boards in Marcola, and Stephany goes there as often as she can to ride. She used to compete with Gemmy in dressage, but now she just rides for pleasure. She's also an avid walker and gets out daily for a long walk.

Computing Center

Don Gathers
Network Engineer, Network Services

If you have questions on file servers, Don Gathers is the man to see.

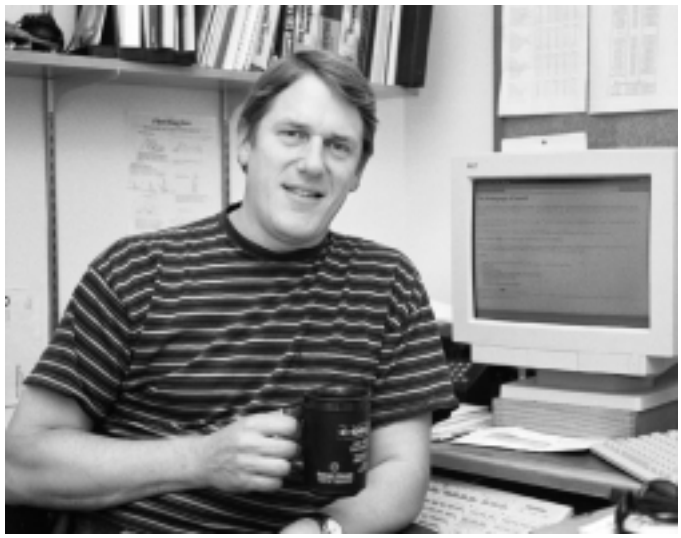
Born in the small town of Clarion, Pennsylvania, Don earned a BS in Communication from Clarion University of Pennsylvania, then headed for California. He entered the computer world through data entry, and got involved with Novell servers while working on a data conversion project. In the early '90s he moved to Oregon and began work in the UO Budget Office, where he received further Novell training and eventually earned CNE certification. In 1993 he joined Network Services as a network engineer.

In addition to serving as the central contact for people on campus with file server questions, Don administers KAHUNA, the file and print server for the Computing Center. He is also presently involved with setting up an archeological database on a web server for Infographics, a research facility associated with the Geography Dept.

Don says he and his wife Lori came to Oregon "on a whim." Lori's parents were looking at Oregon property, and she and Don joined them and other family members in buying a subdivision in Veneta. Don, Lori, and their children, Jordon, 9, and Cierra, 8, now live surrounded by family and within bicycling distance of Fern Ridge Reservoir.

When Don's not fishing on the McKenzie River or spending time with his kids, he enjoys working in the garden and listening to jazz.

Tim Miller
Academic Microcomputer Lab Manager, Computing Facilities



Tim Miller was born in the Midwest and arrived in Eugene at age four when his father joined the faculty at the UO School of Music. Before he graduated from high school, he spent four years in Europe during his father's sabbaticals and teaching assignments.

Tim earned a B.A. in German Language and Literature from the UO, took some graduate classes, and then went to work for the Oregon Department of Justice. He also worked for Software Sciences, a real estate software company, doing installations and tech support and coding before coming to the Computing Center in June 1996.

Tim now provides tech support for both Klamath and Millrace instructional labs. He keeps the labs up and running, does networking, installations, and maintenance, and supervises student assistants. The biggest challenge, he says, is figuring out what users mean when they complain that something "isn't working right."

Tim has two daughters, Chloë, 12, who's a helper in her web design class at Roosevelt, and Edie, 9. He and the two girls often bike around town together. In addition to juggling work and family life, Tim also juggles balls, knives, and flaming torches. He's performed at the Lane County Fair, Country Faire, Saturday Market, Creswell Fourth of July picnic, and other gatherings.

Tim also enjoys riding and fixing up bikes and collects "cool 20th century furniture."

WINTER WORKSHOPS

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

There is no registration; just show up a few minutes before the scheduled start. All seating is available on a first-come, first-served basis. You must meet the workshop prerequisites as stated in the description. If fewer than five people are present ten minutes after the scheduled start, the workshop may be canceled or rescheduled at the discretion of the instructor.

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** (email: *cbell@darkwing.uoregon.edu*).

Workshop	Day/Date	Time	Location	Presenter

This schedule is subject to change. See *http://libweb.uoregon.edu/it/* for course outlines/materials and the most current information.

Basic Computing and Software Skills

***Endnote/Procite*: What Are These, and Why Should I Use Them?**
Learn how to use bibliographic software

Tue Feb 1	3:30 - 4:50pm	RSR	Brownmiller, Lenn

Introduction to SAS and Statistical Anaylsis ☆ - ✔ Prerequisites (basic knowledge of UNIX or VMS)

Thu Jan 20	2 - 3:50pm	EC	High

Basic Internet Skills

Introduction to the World Wide Web	Thu Jan 20	10 - 11:20am	EC	Chadwell
	Mon Jan 31	3 - 4:20pm	EC	Felsing

Beyond Just Surfing - ✔ Prerequisites (*Introduction to the World Wide Web* or familiarity with a graphical web browser)

Tue Feb 1	1 - 2:20pm	EC	Ward
Thu Feb 3	2:30 - 3:50pm	EC	Frantz
Mon Feb 14	1 - 2:20pm	EC	Ward

Power Web Searching - ✔ Prerequisites (*Beyond Just Surfing* or experience using at least two different search engines)

Tue Jan 25	1 - 2:20pm	EC	Jenkins
Thu Feb 3	10 - 11:20am	EC	Paynter
Tue Feb 15	1 - 2:20pm	EC	Sotak

Web Searching with *Sherlock* (Macintosh)	Tue Feb 1	2 - 3:20pm	ITC	Heerema, Howell, Heinzkill

Communication & Research Topics

Academic Universe (Introduction to *Lexis/Nexis*)
This workshop iscusses the types of full-text documents available (e.g., newspapers, wire services, corporate financial data, business and legal periodicals) and searching techniques.

Tue Jan 18	1 - 2:20pm	EC	Galbraith
Fri Feb 4	1 - 2:20pm	EC	Galbraith

* WORKSHOP LOCATION CODES *

EC: Electronic Classroom (Windows)	144 Knight Library
ITC: Macintosh Classroom	267B Knight Library
RSR: Reed Seminar Room (Windows)	235 Knight Library

☆ **Requires an active account on DARKWING or GLADSTONE**

WINTER WORKSHOPS

Workshop	Day/Date	Time	Location	Presenter
Communication & Research Topics, continued…				
American Fact Finder ***(New!)*** - This is the Census Bureau's population data access tool for locating demographic, social and economic data on the web				
	Thu Feb 10	10 - 11:20am	EC	Stave
	Tue Feb 15	2:30 - 3:50pm	EC	Stave
Managing a Majordomo List (***http://darkwing.uoregon.edu/~llynch/majordomo/***)				
	Mon Jan 17	4 - 4:50pm	EC	Lynch
Net a Job: Use the Web - ✔ Prerequisites (*To register for this workshop, contact the UO Career Center at 346-3235)*				
	Tue Feb 22	3:30 - 4:50pm	EC	Songer
Using a *Blackboard CourseInfo* Course Web Site - ✔ Prerequisites				
	Fri Jan 14	2 - 2:50pm	EC	Johnson
Using *MHonArc* to Create a Web Archive for a Majordomo List (***http://darkwing.uoregon.edu/~consult/deptcomp/***)				
	Mon Jan 24	4 - 4:50pm	EC	Lynch
Introduction to *PowerPoint*	Tue Feb 22	2 - 3:50pm	ITC	Heerema
Basic Web Publishing Skills ☆ - ✔ Prerequisites				
Web Publishing I	Mon Jan 24	1 - 2:50pm	EC	Benedicto
	Thu Jan 27	10 - 11:50pm	ITC	Frantz
Web Publishing II	Mon Jan 31	1 - 2:50pm	EC	Brownmiller
	Thu Feb 3	10 - 11:50am	ITC	Galbraith
Web Publishing III ***(New!)***	Mon Feb 7	1 - 2:50pm	EC	Johnson
Web Publishing Beyond the Basics ☆ - ✔ Prerequisites				
Cascading Style Sheets (*http://darkwing.uoregon.edu/~jqj/inter-pub/css/*)				
	Tue Mar 7	1 - 2:50pm	RSR	Johnson
Web Design Principles and Practices (*http://darkwing.uoregon.edu/~cbell/design/*) - ✔ Prerequisites				
	Tue Feb 29	1 - 2:50pm	RSR	Bell
Web Graphics - ✔ Prerequisites	Wed Feb 16	1 - 2:50pm	RSR	Kim
Web Programming I - ✔ Prerequisites	Fri Feb 25	2 - 3:50pm	RSR	Johnson
Web Programming II - ✔ Prerequisites	Fri Mar 3	2 - 3:50pm	RSR	Johnson

Workshops Available on Video

Looking for an alternative to the workshop format? The Computing Center Documents Room (Room 205) and Media Services on the ground floor of the Knight Library have a growing collection of videos on using computers and computer software. You can use your UO picture ID to check out these videos, or schedule a viewing room in Media Services. For a list of available titles and descriptions, visit ***http://micro.uoregon.edu/workshops/*** Call **346-4406** or **346-3091** for more information.

* WORKSHOP LOCATION CODES *

EC: Electronic Classroom (Windows)	144 Knight Library
ITC: Macintosh Classroom	267B Knight Library
RSR: Reed Seminar Room (Windows)	235 Knight Library

☆ **Requires an active account on DARKWING or GLADSTONE**

SAS Dates and the Y2K Bug:

Robin High
Statistical Consultant
Academic User Services
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The year 2000 has arrived, and if you're a SAS user you may wonder if programs that use dates are going to give you correct results. This article discusses how SAS handles the Y2K dilemma.

The good news is that all versions of the SAS system currently in use correctly represent dates from 1582 A.D. to 20,000 A.D. Leap years, century, and fourth-century adjustments are made automatically.

SAS stores dates internally as an integer: the number of days since January 1, 1960 (the reference point). Dates prior to 01/01/1960 are stored as negative numbers. Using a FORMAT statement, you can print the date value in a wide variety of date lists, e.g.,

```
DATA dt;
FORMAT date mmddyy10.;
i= -365; date=i; OUTPUT dt;
i=    0; date=i; OUTPUT dt;
i=  366; date=i; OUTPUT dt;
i=14610; date=i; OUTPUT dt;
PROC PRINT DATA=dt;
VAR i date;
RUN;
```

PROC PRINT produces the following output:

OBS	I	DATE
1	-365	01/01/1959
2	0	01/01/1960
3	366	01/01/1961
4	14610	01/01/2000

If you always read date variables from external data files with 4-digit years, you don't need to read any further in this article. SAS reads and processes all 4-digit years properly and prints them the way you expect as long as you choose the appropriate date format.

However, if you habitually use date formats with 2-digit years like 12/31/99, the information in this article is *essential* now that we live in the year 2000.

How to Avoid a Y2K Glitch

There are three primary ways to avoid a Y2K glitch in a SAS program:

1. Always use 4-digit years such as 12/31/1999 in external data files. *This is the most important and effective way to ensure that your programs work properly.*

2. Use SAS date formats (not character formats) that specify 4-digit years for input and printing. Existing SAS code that formats dates with 2-digit years should be edited to ensure date values are processed correctly.

3. If you absolutely *must* use 2-digit year values, invoke the *YEARCUTOFF=system* option in an OPTIONS statement (see description on page 19).

How You Can Prepare

The 'Yearcutoff' Option

The Y2K problem is a legitimate concern in SAS whenever you have an incomplete year specification in an external data file (e.g., using 99 to represent 1999). However, you can still use the 2-digit year format in SAS date values if you know how the "YEARCUTOFF" option works.

First, determine the default value of YEARCUTOFF by running a SAS program with the following command:

```
PROC OPTIONS OPTION=yearcutoff; RUN;
```

On DARKWING and OREGON, the SAS log file reads:

```
YEARCUTOFF=1910 Cutoff year for DATE7. informat
```

which indicates that 1910 is the default cutoff value. This default value could change in the future, so it's prudent to check it occasionally.

If you want to change the default YEARCUTOFF value to specify some other year as the beginning value in a 100-year span, include the specification with a system OPTIONS statement anywhere in the program prior to the use of the date values. Valid values for the specified first year of the 100-year span can range from a low of 1582 to a maximum of 19900. Your chosen value can be written into an OPTIONS statement as shown below.

Example 1:

```
OPTIONS yearcutoff=1920;
```

This OPTIONS statement includes YEARCUTOFF=1920, which specifies that 1920 is the first year of a 100-year span of a 2-digit year. In this case, the 100-year span ranges from 1920-2019, inclusive:

```
1900..1920...1930.....2000...2010...2019...2025
        |                            |
        ______________________________
               100 Year Span
```

This means a 2-digit year in a date value such as 12/31/15 represents December 31, 2015 and 12/31/22 represents December 31, 1922.

Example 2: Dates with both 2-digit and 4-digit years. In the next example, note the YEARCUTOFF= option is now set to 1930. The dividing year is changed to 1930 so that 2-digit years from 30-99 are treated as 1930-1999 and years coded as 00-29 are treated as 2000-2029:

```
OPTIONS yearcutoff=1930;

DATA schedule;
FORMAT jobid $char4. projdate
mmddyy10.;
INPUT @1 jobid $ @6 projdate
mmddyy10.;
CARDS;
A100 01/15/35
A110 03/15/2035
A200 01/30/16
B100 02/05/00
B200 06/15/2000
;

PROC PRINT DATA=schedule;
RUN;
```

PROC PRINT produces this output:

```
OBS   JOBID    PROJDATE
 1    A100   01/15/1935
 2    A110   03/15/2035
 3    A200   01/30/2016
 4    B100   02/05/2000
 5    B200   06/15/2000
```

When you compare observations 1 and 2 in the data (following **CARDS;** in the data step) and the output listing, notice the difference in the interpreted value of a year when you specify a 2-digit year instead of a 4-digit year.

In the input data observation, 1 has a 2-digit year of 35, and observation 2 has a 4-digit year of 2035. Since YEARCUTOFF=1930, the 2-digit year 35 defaults to 1935. The 4-digit year 2035 in observation 2 is unaffected by the YEARCUTOFF= option.

Observation 3 is read with a 2-digit year (16) that defaults to 2016 based on the value specified in YEARCUTOFF (=1930).

Observations 4 and 5 show similar results. In the data file, observation 4 specifies a 2-digit year of 00; and observation 5, a 4-digit year of 2000. Because the value of YEARCUTOFF=1930, the resulting years for the two observations are the same on the printed output. These results emphasize that specifying a 2-digit year may or may not result in the preferred century prefix if you aren't aware of the YEARCUTOFF value that applies.

The YEARCUTOFF= option does not affect existing dates that are currently in your SAS datasets. Since a date is stored as an integer number (see Example 1), the way it is interpreted in a program is unaffected. The way it prints to a listing is determined only by the FORMAT statement you choose.

Other Potential Problems

Date functions in the SAS System that use 2-digit years are also affected by the value of the YEARCUTOFF= option. For example, suppose you use the MDY and YEAR functions with a 2-digit value of 15 as the year parameter, e.g.,

```
yy=15; yyyy=YEAR(MDY(12,31,yy));
```

The new variable yyyy will equal 1915 or 2015, depending on the existing value of YEARCUTOFF.

Writing dates with 2-digit years to external data files. Suppose you want to write a SAS date equivalent to January 15, 2001, to an external data source with a 2-digit year. Using the MMDDYY8. format with YEARCUTOFF=1920, a 2-digit year of 01 would appear. Ten years ago, others using the same data could easily assume the century prefix, but during the 21st century the century prefix of the 2-digit year will not be as clear. **Moral: always check the setting of the YEARCUTOFF= option!**

For additional details on how the YEARCUTOFF= option works and how to determine the optimum settings for your applications, refer to the document "Using the YEARCUTOFF= Option to Interpret 2-digit Years in Your SAS Applications," available online at **http://www.sas.com/techsup/download/technote/ts618.html**

Summary

SAS is well prepared to handle dates in the 21st century. You should have no problems if you

1. always use dates with 4-digit years in your external data sources when using date functions or writing to external files

or, if that's not possible,

2. determine the optimal setting for the YEARCUTOFF= option in your working environment

Internet2 Allows Connection of 'Secondary Members'

Joe St Sauver
joe@oregon.uoregon.edu

Internet2 was originally established as a consortia of Carnegie Research I and Research II universities, and it currently has about 165 such "primary" members, including Oregon, Oregon State, Portland State, and Oregon Graduate Institute.

In December of 1999, however, UCAID (University Corporation for Advanced Internet Development), the organization that runs Internet2, decided to permit primary members to sponsor new "secondary" members.

These new secondary members, unlike Internet2's traditional primary members, are envisioned as typically being

- primary and secondary schools
- community colleges
- small and moderate-sized liberal arts colleges
- federal, state and local government agencies
- selected research and development divisions of corporations
- libraries
- museums, and
- archives

Secondary members need not pay an Internet2 membership fee, but must be sponsored by a primary member that has an ongoing collaborative relationship with the secondary.

Secondary members arrange to connect to Internet2 via an existing primary member or Gigapop of their choice (where the connecting member may or may not be the same as the sponsoring primary member), subject to whatever financial arrangements may be negotiated between the secondary and their connecting primary member/connecting Gigapop.

The University of Oregon will soon be submitting applications for secondary status for a number of its networking partners.

For full details on the secondary membership program, see the Internet2 web site at **http://www.internet2.edu/**

UO Broadcasts NetAid Concert via Oregon Gigapop

On October 9, the UO Computing Center broadcast 14 hours of live concert programming and backstage interviews to more than 150 universities around the nation.

The international all-star rock show, NetAid, marked an effort by Cisco Systems, Inc., and the United Nations Development Programme, to test the Internet of the future and tap its potential for promoting positive social change.

Cisco's IP/TV and IP Multicast technology were central to the multicast trial, which broadcast high-quality video simultaneously to an unlimited number of PC users.

With IP/TV, every networked user can watch live events such as NetAid, attend business meetings, or take university classes from their computer desktop. Cisco has made IP/TV available to all Internet2 schools at no charge.

The UO continues to provide a wide range of programs on Internet2, including public broadcasts, prerecorded NASA flights, and music programs.

UO Joins Advanced Internet Measurement Effort

The University of Oregon is now participating in Advanced.Org's Surveyor program, a cutting-edge Internet measurement effort targeting one-way delay metrics.

Based on work being done in the IETF's Internet Protocol Performance Metrics Working Group, Surveyor measures the performance of the Internet paths among partcipating organizations around the world. It is also developing methodologies and tools to improve the ability to effectively engineer the Internet infrastructure. For more information on this program, see **http://www.advanced.org/Surveyor**

Surveyor complements and enhances other measurement efforts with which the UO is also involved, including NLANR's AMP program. See **http://amp.nlanr.net** for more information about AMP.

New Internet2 Institutions and International Networks Poised to Connect to Abilene

A number of Internet2 institutions are poised to connect to Abilene, the high-performance academic and research network backbone, and may already be "live" by the time you read this. Those institutions include Brown, CMU, East Carolina, Florida Atlantic, Harvard, Lehigh, Maryland, Memphis, Minnesota, MIT, Ohio, Penn State, Pittsburgh, RPI, Syracuse, Tufts, Tulane, Utah, and WPI.

Internet2 institutions already connected to Abilene are listed below.

Internet2 Institutions Already Connected to Abilene

Alabama
Alaska
Argonne
Arizona
Arizona State
Arkansas

Baylor
Boston U
Buffalo

Cal Poly Pomona
Cal State San Bernadino
Cal State West Ed
Cal Tech
Chicago
Colorado State
Columbia
Connecticut

Deleware
Duke

EROS Data Center

Florida International

George Mason
Georgetown
Georgia

Hawaii
Houston
Idaho
Illinois-Chicago
Illinois-Urbana
Indiana
ISI
JPL

Kansas
Kansas State

LSU

Michigan
Michigan State
Michigan Tech
Microsoft Research
Mississippi State
Montana State

Nebraska
NOAA
North Carolina
North Carolina State
North Dakota
North Dakota State
NYU

Old Dominion
Oklahoma
Oklahoma State
Oregon
Oregon State

Penn
Portland State
Purdue

Rice
Rochester

San Diego Supercomputer Center
San Diego State
South Dakota
South Dakota State
SDSMT

Southern Methodist
Stanford

Texas A&M

UC Berkeley
UC Davis
UC Irvine
UCLA
UC Riverside
UC San Diego
UC San Francisco
UC Santa Barbara
UC Santa Cruz
USC

Vanderbilt
Virginia
Virginia Tech
Wake Forest
Washington
Washington State
Wayne State
Wisconsin-Milwaukee
William and Mary
Wyoming

NLANR Team Introduces Netlog

NLANR's Netlog application helps you get reliable throughput measurements

Joe St Sauver
joe@oregon.uoregon.edu

When working with networked applications, most of us want to be able to track our network's performance. How do you find out whether you're sending 50Kbps, 500Kbps, or 5000Kbps?

NLANR's Distributed Application Support Team has released an application called Netlog that can help you get throughput measurements on a more uniform and reliable basis.

For information on using DAST's Netlog application, see **http://dast.nlanr.net/Projects/netlog/doc/index.html**

Note: CS Counter Service Terminated

As of this month, the World Wide Web counter service formerly offered by the Computer Science department at *counter.cs.uoregon.edu* has been terminated.

For alternate means of tracking visits to your web page, see **http://www.counterguide.com/**

Welcome to Visual Numerics®

Visual Numerics' IMSL Libraries Now More Widely Available

Joe St Sauver
joe@oregon.uoregon.edu

If you're working on Darkwing writing FORTRAN or C programs and have had a need for high-quality, well-tested numerical and statistical subroutines, you may already be familiar with Visual Numerics' IMSL Libraries. You may even already be using them. But now that the university has licensed IMSL for use on campus PC workstations, IMSL is more widely available.

Visual Numerics has been providing algorithms for mathematical and statistical computations under the IMSL name since 1970. IMSL Libraries are a comprehensive set of numerical recipes that can be embedded into your FORTRAN and C numerical analysis applications.

IMSL provides prewritten functions, or "building blocks," which eliminate the need to write code from scratch. These subroutines tend to be very well tested, computationally efficient, and numerically stable over a wide range of data inputs—unlike "hand rolled" routines that may be created by simply coding textbook algorithms. (While such "hand rolled" routines may be pedagogically simple, they are often computationally inefficient and can be unstable for asymptotic data.)

With IMSL, you can build applications that are portable across multiple platforms. The program features comprehensive statistical and mathematical functionality, and uses descriptive function names for intuitive programming. Extensive online documentation and error diagnostics are also included.

The University of Oregon has been participating in the Visual Numerics Academic Site Licensing program since its birth in 1996.

The university's current site license for IMSL includes the following platforms on campus:

IRIX64	HP-UX	Linux
AIX	Solaris	
Digital UNIX	Windows NT/95	

IMSL Libraries are installed on Darkwing, Gladstone, and Oregon.

If you're a programmer and you'd like to install IMSL Libraries for v. 4.01 (FORTRAN90) or 3.01 (C), please contact Hans Kuhn (**346-1714**; *hak@oregon.uoregon.edu*).

Media Services Open House

Thursday February 10 noon - 5 PM

• demonstrations • new services • instructional television product showcase

• premiere showing of "Woodie Guthrie and the BPA" video project •

Mathematica 4.0.1 Upgrade Available on Public Domain Libraries

Hans Kuhn
hak@oregon.uoregon.edu

The latest version of Mathematica is now available on the CC Public Domain (Macintosh version) and public.uoregon.edu (PC version).

There are no special instructions for upgrading with this release, so current users should be able to upgrade from 3.0.x with no problems. Installation instructions are available at

http://darkwing.uoregon.edu/~hak/mathematica/

You'll need to contact your departmental representative for a password. For your convenience, a list of departmental representatives is included on the web page cited above.

Mathematica for Other Platforms

Mathematica software for other platforms (Linux, SunOS/Solaris, AIX, Tru64 Unix, HP-UX, and IRIX) is available from *limestone* as nfs mounts. For more information, see **http://darkwing.uoregon.edu/~hak/mathematica/**

Questions?

Feel free to send questions to Hans Kuhn at
hak@oregon.uoregon.edu

WITH THE RIGHT RESOURCES, YOUR IDEAS REALLY CAN CHANGE THE WORLD.

At Active Voice, our software is making communications easier and faster for virtually every type of business worldwide. We're the leading provider of PC-based voice processing systems. And we're committed to staying out in front for years to come. Repartee®, TeLANophy®, and Lingo™ are just the beginning. What's next is in your hands. Seattle based Active Voice Corporation has the following job opportunities available. We're looking for employees to work in our Seattle office.

Software Quality Assurance Engineer

Responsibilities: • Develop and maintain quality standards for communications software • Develop and execute test plans and automated systems tests • Coordinate with multiple disciplines to define requirements and design features for communications, networking, and desktop software • Ensure quality of software throughout development cycle; from conception through design and development to release **Requirements:** • Strong analytical and critical thinking skills • Ability to analyze problems, communicate, and lead in a team environment • BS/BA or equivalent: CS, EE, Math, or Physics preferred • Experience with communications software and PC hardware, exposure to C/C++ programming a plus • Strong desire to learn about and participate in the software development process **Job Code - SQA-710UO**

Programmer

Responsibilities: • Design, develop, maintain, and test new and existing commercially available voicemail and call processing software applications for enterprise computing environments • Participate in a cross discipline team development environment to obtain creative solutions involving hardware and software in a real-time, telephony environment • Assist with technical documentation and support **Requirements:** • Experience developing PC-based applications in C/C++ under Windows • Strong troubleshooting and analysis skills • BA/BS in one of the following majors: Computer Science, Math, Physics, Electrical Engineering • Strong verbal and written communication skills • Excellent time management skills and a strong desire to develop complete, product oriented solutions **Job Code - SWP-125UO**

Software Test Engineer

Responsibilities: • Develop and execute test plans and automated systems tests • Define requirements and design features for communications, networking, and desktop software **Requirements:** • Strong programming skills in C • Ability to analyze, communicate and lead • BSCS/BSEE or equivalent • Experience with communications software, PC hardware, OS/2, and Windows preferred **Job Code - SWT-710UO**

For complete job descriptions, please visit our web site. We offer an energetic and spirited workplace and fantastic benefits packages including medical/dental insurance, 401(k), stock purchase plan, profit sharing, and much more. **Send a resume and cover letter to personnel@activevoice.com or Active Voice Corporation, 2901 3rd Avenue, Suite 500, Seattle, WA 98121.** Active Voice is an equal opportunity employer.

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COMPUTING CENTER GUIDE

Computing Center Web Site
http://cc.uoregon.edu/

Microcomputer Services
(Room 202)

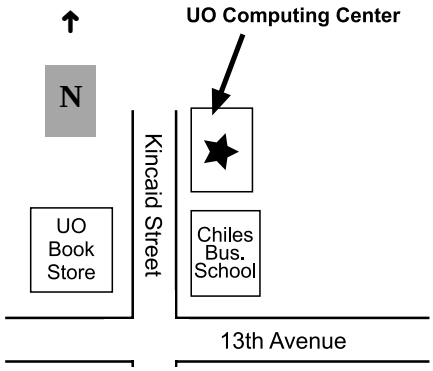
- microcomputer technical support
- help with computing accounts, passwords
- scanning, CD-burning, digital video
- help with damaged disks, files
- system software help
- Internet connections, file transfers
- public domain software, virus protection
- software repair (carry-in only, $60/hr, 1 1/2 hr.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

346-4412
microhelp@oregon.uoregon.edu
http://micro.uoregon.edu/

Large systems consulting
(Rooms 233-239 **)**

- VMS, UNIX (Gladstone, Darkwing, Oregon)
- statistics packages
- email

346-1758
consult@darkwing.uoregon.edu
consult@gladstone.uoregon.edu
consult@oregon.uoregon.edu



Documents Room Library
(Room 205)

346-4406
http://cc.uoregon.edu/~docsrm

Electronics Shop

For computer hardware repair, installation, and upgrade services, call **346-4403** or write *hardwarehelp@oregon.uoregon.edu*

Network Services

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

346-4395
nethelp@oregon.uoregon.edu
http://ns.uoregon.edu

Modem Numbers

Dialin modem numbers for UOnet, the campus network:

- V.90 **346-6520**

Computing Center Hours

Sunday	9 am - 8:30 pm
Monday - Friday	7:30 am - 8:30 pm
Saturday	9 am - 4:30 pm

COMPUTING NEWS
UO COMPUTING CENTER
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