

Computing Resources At The University of Oregon

**New Faculty Orientation
Friday, September 24th, 2004
Noon**

**Joe St Sauver (joe@uoregon.edu)
Director, User Services and Network Applications
University of Oregon Computing Center
346-1720**

<http://darkwing.uoregon.edu/~joe/faculty-orientation-2004.pdf>

Our Goals Today:

- Familiarize you with UO computing resources available for your use, and with local policies that may affect you**
- Address commonly asked questions about computing and networking which we believe you may have**
- Encourage you to follow some best common practices which are routine here at UO, but which may not have been routine at your old institution**
- Help you learn where to go for more information. [E.g., the Computing Center (the organization) is spread across multiple buildings, including one building actually called the Computing Center, although many public services are actually delivered from the basement of McKenzie Hall.]**
- all in just fifteen to twenty minutes!**

Note: This briefing covers a very wide range of topics including some fairly technical material which may not be applicable to everyone. Feel free to focus only on the applicable parts!

UO's Primary Faculty Shared System

- Faculty typically use *darkwing.uoregon.edu* to do research and instructional computing, receive email and publish web pages. It is an eight processor Sun Enterprise 5500 server running Solaris, and will be substantially upgraded this year.
- Faculty members who want an account on Darkwing should see Connie French, the Computing Center Accounts clerk, at 157 McKenzie Hall. (Be sure to bring along your faculty ID card or letter of appointment.)
- Your Darkwing username and password will also work for dialin modem access to UONet, campus wireless access, virtual private network (“VPN”) access from off campus cable modem/DSL ISPs, access to Blackboard, etc.
- For particularly computationally intensive work, you may want to investigate our compute intensive Opteron cluster (see <http://acad-cl0.uoregon.edu>)
(that's acad dash see el zero dot uoregon dot edu)

Use of Darkwing

- **Darkwing is free in virtually all cases for academic users, but your use of Darkwing and the network is subject to the University's Acceptable Use Policy (for example, no commercial use of Darkwing is permitted due to software/hardware licensing constraints). The AUP is available at:**
http://cc.uoregon.edu/docs/acceptable_use.html
http://cc.uoregon.edu/aup_addend.html
- **While we don't do "chargebacks" or usage accounting, your disk usage is limited. Quotas can also be adjusted to accomodate special projects subject to disk space availability. The default quota is currently 100 megabytes, but is planned to increase to 200-250 megabytes later this year.**
- **Note that accounts may not be shared with family members.**

Passwords

Every half year you will be required to change your Darkwing password.

An easy way to do that is to use our SSL-secured web based password changer:

<https://password.uoregon.edu/>

We require you to use a strong password for your account, as much for the protection of others as for your own security. A combination of upper and lower case letters plus numbers and special symbols is good; avoid words in any dictionary (we've got a VERY extensive collection of word lists, just like the hacker/crackers!)

Stuck? You can also submit a password change request in person at 157 McKenzie; be sure to bring along your faculty ID.

Accessing Your Darkwing Email

- We support a number of methods for faculty members to access their email, including a web based email interface at:

<http://email.uoregon.edu>

- We also offer and support most common email access options including shell access (with Pine or similar email clients), access via POP3, and access via IMAP (probably the preferred method if you read or send a lot of email every day).

For information on configuring a POP or IMAP client to work with Darkwing, see *<http://micro.uoregon.edu/email/>*

- Your Darkwing email address can be written either as:
<yourusername>@darkwing.uoregon.edu or as just
<yourusername>@uoregon.edu

For example, jersmith@darkwing.uoregon.edu and jersmith@uoregon.edu refer to the same account

More About Email

- **If you have more than one account (such as a departmental account or a Yahoo or Hotmail account as well as a Darkwing account), be sure to check your email on all your accounts, or forward your email from the account(s) you don't use to the one you do use (people may write to you at any of your addresses). See: <http://password.uoregon.edu/forward/>**
- **The Computing Center actively works to reduce or eliminate the amount of unsolicited commercial email (“spam”) our users receive. If you receive spam on your Darkwing account, please forward a copy with full headers within a day or two of the time it was sent to spam@uoregon.edu (Information on enabling full headers: <http://micro.uoregon.edu/fullheaders/>) If you don't want your Darkwing account spam filtered, visit <http://password.uoregon.edu/allowspam>**
- **There is a 5MB/message file size limit in place for in- and out-bound messages**
- **We automatically “defang”/strip virus-ish attachments**

Mailing Lists and Usenet News

- **Faculty can create a majordomo-based email list for use in conjunction with their teaching or research. For information on doing this, see:**

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

- **We are also happy to create local Usenet news groups for UO classes; if you are interested in learning more about this option, please send email to joe@uoregon.edu**

If you're not familiar with Usenet, it's the online discussion fora archived by Google under "Groups" from <http://groups.google.com/>

[Note that the Computing Center offers two news servers, news.uoregon.edu and platform.uoregon.edu, with a diverse selection of newsgroups, however we do *not* by any means carry all newsgroups currently in circulation]

Faculty Web Publishing

- You can publish web pages via your darkwing account
- For a basic recipe on how to do this, see:
<http://cc.uoregon.edu/webpageunix.html>
- Pages do not need to be preapproved, nor do they need to follow a particular style guide, although we urge you to make your pages as accessible to people with disabilities as possible and to avoid page designs which rely on Java, Javascript, Flash, etc. (UO has traditionally been fairly security conscious, and many UO users routinely run with cookies, Java & Javascript disabled)
- *Blackboard* is available through the UO Library; for more information, see *<http://blackboard.uoregon.edu/>* also see *<http://libweb.uoregon.edu/kitc/faq/blackboard.html>*

More About the Web

- **cgi-bin's are supported in user web directories on darkwing, and run under suexec with certain features designed to prevent them from being security risk (for example, if you are using perl, you must explicitly set a writable umask for files). The most common cgi-bin programming language here at Oregon is perl; php is also now available.**
- **FrontPage server side extensions are NOT available.**
- **Your web pages will automatically be indexed by Google. Google offers a UO-only search page at:**
<http://www.google.com/univ/uoregon>
- **The University operates a voluntary web cache/proxy server at the address *<http://proxy.uoregon.edu>* on port 3128 -- using it may accelerate access to web pages.**

Other Software on Darkwing...

- A variety of *statistical packages* (SAS, SPSS, BMDP, MINITAB, EQS, RATS, S Plus).
- *Symbolic math toolboxes* such as mathematica, matlab and magma
- *Compilers* such as Fortran, C, C++, etc.
- *Technical typesetting* (TeX/LaTeX)
- *Miscellaneous* software products such as: Lindo (linear programming), Radiance (architectural ray shading), Rasmol (3D molecular models for chemistry), and Clustalw (gene sequencing)
- A current chart showing what software's available is coming out in the Fall 2004 CC Newsletter (in press)
- Note that many packages are also available on the compute intensive Opteron cluster (see <http://acad-cl0.uoregon.edu>) (that's acad dash see el zero dot uoregon dot edu)

What About Arranging Student Access to Computing Resources?

- **All students pay a \$90 per-term educational technology fee; additional fees may apply for access to some labs, or for printing. Expenditures associated with that fee are controlled by the Ed Tech Committee with the administration.**
- **Undergraduates automatically get a generated account on gladstone (another Sun Enterprise 5500 running Solaris). Graduate students automatically get an account on darkwing, and can also self-authorize an account on gladstone if they want one.**
- **Instructors can also arrange for temporary undergrad class accounts on darkwing (so that students can use software that may only be installed there) by advance consultation with the CC Accounts Clerk (Connie French, 346-1738, account@uoregon.edu)**

Getting At the Large Shared Systems

- In addition to other access to large shared systems (via a web browser or a dedicated email client), you can also "login" to Darkwing and do work at the % prompt (the "shell prompt.")
- To get shell access to the large shared systems, you need to use ssh (secure shell) -- ssh works just like telnet for the most part, except that it is encrypted "end to end," thereby insuring that an evesdropper can't lurk on the network and evesdrop on your terminal session.
- SSH for the PC and the Mac is available on the Duckware CDROM.
- A nice introduction to working at the shell prompt is Harley Hahn's "A Student's Guide to Unix" available from the CC Documents Room in the basement of McKenzie Hall
- For most users, there's no need to work at the shell prompt but it is an option for you if you're interested.

Consulting Support

- **Large system consulting support is available by phone at 346-1758, via e-mail to *consult@darkwing* or on a drop in basis in the consulting corridor on the 2nd floor of the CC.**
- **Robin High, an excellent consulting statistician, is available to help faculty and others with statistical questions they may have; he's at *robinh@uoregon.edu* 346-1718 or 219 Computing Center.**
- **You may also have a departmental computing support person who can help you with computer problems:**

<http://deptcomp.uoregon.edu/local/index.html>

See also *<http://micro.uoregon.edu/apprentice/contact/>*

Training

- **A variety of short courses are offered throughout the term; some are offered in conjunction with the Library, others are offered by the CC or departmental support people. See the schedule in the fall *Computing Center Newsletter* or go to**

<http://libweb.uoregon.edu/it/>

- **CC staff will also usually be willing to come in and talk to undergraduate or graduate classes about selected topics (such as email, www, unix, stat packages, etc.)**

Call x6-1758 or send mail to *consult@darkwing* to arrange for a CC instructor to do that sort of in-class training

Documentation

- **The Documents Room Library (175 McKenzie Hall) has an extensive collection of vendor supplied manuals, locally prepared writeups, computer magazines and journals, software, CD ROM and video tape resources. Most books circulate; most handouts can be picked up for free**
- **Additional documentation is available online; see *<http://cc.uoregon.edu/documents.html>***

Standard manual pages are available under Unix (try *% man man* to begin after ssh'ing onto Darkwing)

For SAS documentation, go to *<http://sas.uoregon.edu/>*

- **We also publish a quarterly newsletter online and in hard copy form; see *<http://cc.uoregon.edu/cnews/>***

The CC Newsletter will usually have the latest information and news about computing and networking at the U of O

External Network Connectivity

- **UO connects to the commodity Internet via OWEN/NERO (which provides connectivity for OUS universities, state agencies, and most public K12 schools); OWEN/NERO is run from the CC here in Eugene. OWEN/NERO is part of TheQuilt, and purchases transit from Sprint and Level3; we also peer locally with additional providers via the Oregon Internet Exchange (run by the University here in Eugene), and at the NWAX peering point in Portland, and at the PNWGigapop in Seattle.**
- **We are also a member of Internet2, and connect to Abilene via the Oregon Gigapop (located here at UO). The Oregon Gigapop has an OC12 (622 Mbps) circuit via Sunnyvale CA. This unique connection may facilitate your research and collaboration, particularly for those of you in the hard sciences...**
- **The University is actively involved in a number of areas of advanced networking, including IP multicast, IPv6, BGP4 routing, etc., and has both an Advanced Network Technology Center and an NSF-funded Network Startup Resource Center.**

The Local Network

- **Our local campus network is called *UOnet* and consists of shared and switched 10 megabit and 100 megabit ethernet links with a gigabit (1000 megabit) campus core moving toward 10 gigabit.**
- **Most faculty offices, labs, and selected classrooms have network connectivity at this point; student residence halls are wired at one port/pillow, as are most family housing units.**
- **Most offices will already have 10 or 10/100Mbps ethernet. If you need new 10/100Mbps network drops, they can be installed by Network Services for \$100/drop. Gigabit ethernet service may be available for an additional charge in selected locations; contact nethelp@ns.uoregon.edu for information**
- **Many locations on campus have WiFi wireless connectivity. See: <http://micro.uoregon.edu/wireless/> for specific location information, and info on using the wireless network.**

Security and Your Networked PC or Mac

- **GET AND RUN THE UO WINDOWS PC SECURITY CD!**
- **UO does not run with a campus-wide firewall, so it is very important that your PC or Mac be secure; if it is not, it may be exploited by hacker/crackers to attack other systems (in which case it will be subject to being disconnected from the network)**
- **One important step is to keep your system patched up to date; if you're running a Windows PC, use LiveUpdate from the Start menu to apply Service Packs and critical updates. If you use Windows XP, you **SHOULD** use Windows XP SP2.**
- **Please use an antivirus program. We site license Norton antivirus; it is available from Micro Services in McKenzie Hall.**
- **Use an anti-spyware product (some are on the security CD).**
- **Consider using a software firewall program (either the integrated XP SP2 firewall, or a commercial product)**
- **Please cooperate in keeping the network usable; do **NOT** run file sharing programs such as Kazaa, Gnutella, etc.**

Off Campus Network Access

- If you're at home, you can still connect by modem — we offer PPP access via ~600 modems at 225-2200; authenticate with your darkwing email address and password (see <http://micro.uoregon.edu/getconnected/>).

These modems are intended for casual use of no more than a couple hours a day, or 14 hours a week. If you need dedicated (or near dedicated) modem access, you'll want to purchase an account from a commercial ISP).

- Some may also be interested in buying cable modem or DSL access for home; see:
<http://www.comcast.net/>
<http://www.qwest.com/dsl>
http://www.qwest.com/internet/isp_list.html
- If you are coming in from a third party dialin, DSL line or cable modem you should consider using UO's VPN service:
http://micro.uoregon.edu/getconnected/vpn_overview.html

Microcomputers At The U of O

- **Both many PCs (Windows XP and Windows 2000) and many Macs (largely OS X these days (UO site licenses OS X)) are in use; we are not a “PC only” or “Mac only” school, although some departments/schools certainly lean one way or another.**
- **Increasingly demanding applications are being run (which means faster machines, more RAM, bigger disks). If you are buying a new machine, buy a brand name machine with more than-the-absolute minimum horsepower. Guidance is available at: *<http://micro.uoregon.edu/buyersguide/>***
- **The University of Oregon Bookstore offers special pricing on both Macs and selected PC compatibles and software; their web pages are at *<http://www.uobookstore.com/>***
- **A variety of educationally discounted software products are also available via *<http://www.oetc.org/>***
- **Site licensed software (including SAS, Mathematica, and other products) is at *<http://cc.uoregon.edu/sitelicense.html>***

I've Got a PC or Mac and I Need Help!

If you've got a PC or Mac and need help (except with hardware problems), you'll want to get in touch with Microcomputer Services at 151 McKenzie Hall.

Microcomputer Services can help you configure your PC or Mac to connect to the network or to UO's modem pool, and they can help you with microcomputer network applications such as Internet Explorer, Netscape, ssh, etc.

They can also help you with repair of damaged disks and files, do file transfers and conversions, help with computer virus eradication, and provide you with general microcomputer consulting and advice.

Microcomputer Services also produces the Duckware CDROM and a PC Security disk each year, and they run a server containing PC and Mac public domain software.

We have copies of that disk available now...

More About Microcomputer Support

Microcomputer Services also offers multimedia facilities including stations oriented toward scanning, video capture, and CD ROM creation.

We should also mention that Microcomputer Services offers a for-pay machine check in facility, whereby users can check their machines in, and pay to have particularly thorny problems resolved.

The Micro Support Center is located at 151 McKenzie Hall. You can also send email to [microhelp@uoregon](mailto:microhelp@uoregon.edu), call 346-4412 or see their web pages at <http://micro.uoregon.edu>

There may also be departmental support personnel who can help; see: <http://deptcomp.uoregon.edu/local/index.html>

See also <http://micro.uoregon.edu/apprentice/contact/>

Microcomputer Labs

- **There are several campus labs where instructors can arrange for students to use PCs or Macs; some are general purpose, others are restricted for use only by a particular department's classes or students**
- **There are several free walk-in general purpose student-use micro labs; for more information, please see:**
<http://cc.uoregon.edu/campuslabs.html>
- **The Library offers “information technology centers” that are conceptualized somewhat differently from other more general purpose microcomputer labs; see**
<http://libweb.uoregon.edu/kitc/> and links from that page.

Micro Hardware Repair?

- **If you need your Mac or PC repaired or upgraded, see the Computing Center Electronic Shop, 151 McKenzie.**
- **The Electronics Shop is a Dell certified Tier 1 Service Provider, and a Level 1 Apple-authorized service center, capable of handling virtually any repair on Apple or Windows systems.**
- **The Electronics Shop can also build custom systems to your specification.**
- **Services are billed on a time and materials basis; labor is currently \$80/hour with a half hour minimum.**

Questions? Call 346-4403 or send email to hardwarehelp@oregon; see also http://cc.uoregon.edu/e_shop.html

Administrative Computing

In addition to academic computing, the Computing Center also supports a variety of administrative computing applications, including Duckweb (<https://duckweb.uoregon.edu/>). Duckweb provides SSL-secured access to a variety of information of interest to faculty members, including benefits information and other data. You will also use Duckweb to enter grades for the courses you teach.

Access to Duckweb will require you to enter your faculty ID number, and your six digit Duckweb PAC code.

For more information about Administrative Computing at UO, please see <http://ccadmin.uoregon.edu/>

Telecommunications Services

New this year, Telecommunications Services is now formally part of the Computing Center (although we've all worked together closely for years).

Telecom Services provides a variety of campus services, including delivering your office voice telephone service and voice mail, campus cellular services for university use, paging service for university use (including great prices on alphanumeric pagers), and for-fee H.323 video conferencing services.

More information about Telecommunications Services is available at *<http://telecom.uoregon.edu/>*

Academic Streaming Video: Virage

New this year, the Library and Computing Center are offering streaming media services using a product known as "Virage" which allows faculty lectures to be captured, indexed, archived and distributed to students over the web, with PowerPoint slides synchronized to the video (among other features).

For more information, please see:

http://libweb.uoregon.edu/med_svc/streaming-media/

We encourage you to explore the possibilities of this exciting new instructional vehicle!

Questions?