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in.touch@uwo.ca

Apple Educational Software Purchase

Debbie Jones <debbie@uwo.ca>

With the release of MACOS X Lion, Apple has implemented a significant change to their method of software sales and distribution to the higher educational market.

ITS, Purchasing, and the Campus Computer Store (CCS) have worked together with Apple to develop an official process for the purchase and management of Apple Software at Western. Apple software and licensing will now be coordinated on behalf of Western through the Campus Computer Store providing the following benefits:

- flexibility for campus users to purchase only the number of software licenses they need
- reduced pricing on orders (in the 1 – 19 order size)
- further reduced pricing on orders of twenty or greater of the same software

To make a purchase, provide the CCS with the name and quantity of the software required. Media and license information will be delivered to your department.

After purchase, updates for Operating System software will be downloaded automatically to any installed systems. Updates for other applications will be downloaded by the CCS and distributed to registered purchasers.

CCS will manage distribution of media and licenses for purchases by speed code only. Please note that any purchases made directly with Apple using an Apple ID will be considered personal purchases and cannot be reimbursed via expense report.

The following software falls under the purchase process described above:

- OS X Lion
- OS X Lion Server
- iPhoto
- iMovie
- GarageBand
- Pages
- Numbers
- Keynote
- Aperture
- Final Cut Pro X
- Motion 5
- Compressor 4
- Apple Remote Desktop



About In Touch

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We welcome your comments, suggestions, and articles.

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Notices/Information

- Scheduled System Maintenance takes place during Sundays, 3am - 12noon; Thursdays, 12am - 7am
- ITS Services Document available at:
<http://www.uwo.ca/its/services.pdf>

Need help, have a question?

- Call ITS Customer Support Centre:
519 - 661-3800 ext. 83800
- ASK ITS: <http://askits.uwo.ca/>
- Email using the web form:
<http://www.uwo.ca/its/helpdesk/question.html>

United Way Fund Raiser

Merran Neville <mneville@uwo.ca>

So You Think You can Climb!

Congratulations to the 2011 Support Services Building United stair climb team who raised \$1,737.00 for the United Way. The stair climb took place at One London Place, a 24 floor building the tallest in the city, on November 3 at 5:00pm. Climbers were amazingly fast and accomplished their feat in record time.

ITS staff members Ken Gilliland and Donna Sasges participated as part of the SSB United team. Ken climbed and Donna was the "official" cheer leader. You did us proud!



Ken Gilliland and Donna Sasges



Virtual Desktop Infrastructure

Nancy Wellard <nwellard@uwo.ca>

ITS is currently working with other faculties and departments on campus to develop a Virtual Desktop Infrastructure (VDI) pilot early in 2012.

Often referred to as Desktop Virtualization, Virtual Desktop Infrastructure is the practice where client desktops are run as virtual machines on a server. Desktop virtualization can bring many advantages to both the users and the support staff, including the following:

Software delivery – VDI deployment is based on a central management model for desktop images and applications. This model enables quick deployment of new applications or updates to existing applications.

Power savings – VDI allows the implementation of thin client devices that can lead to significant cost savings for both hardware, and power and cooling

Mobility – The same virtual desktop can be accessed from multiple locations via multiple devices. While initial implementations typically involve traditional lab workstations, the vision is to provide the user access to the same desktop whether they are sitting in a traditional computer lab, in their residence room, in a coffee shop, or at home.

Potential labour savings – Another benefit of the central management design is the elimination of the need for staff to visit each workstation in a lab. Desktop images are pushed out from the server.

Better security – The basic principle behind a VDI implementation is that screens are pushed to the remote access device but all computing, processing and data can stay within the data center.

License compliance – Tracking licenses can be an extreme challenge when running traditional computer labs. The VDI model can simplify this allowing centralization of this management.

Please watch the ITS home page at <http://www.uwo.ca/its/> for more details concerning this initiative.

Helping Hands Award

Merran Neville <mneville@uwo.ca>

ITS staff continue to receive recognition for the outstanding level of support they give their colleagues both in the department and elsewhere on campus. Heather Woods and Reina Tebby are the latest recipients and both received this award at the Fall Resources and Operations retreat.

Remarks from Betty Poots-McGaw: “[Heather’s] dedication and devotion to help her co-workers is an inspiration. ... she has always been there, offering her help in any way possible. Whether it’s an extra pair of hands to count inventory on a Saturday ... or to go get a shipment from downstairs.”

Remarks from Val Dukeshire: “Reina has been a major help in Facilities Management, not only for her knowledge but how she provides that service. You can approach her at anytime and she is always willing to give a helping hand. She ... has a lot of patience dealing with all types of situations. ... Reina is always there when you need her.”

See <http://www.uwo.ca/its/doc/newsletters/InTouch/hha.pdf> for details about this award.



Heather Woods and Reina Tebby

Security Team News

Jeffrey Gardiner <gardiner@uwo.ca>



The internet is a dangerous place. At least, this is how the news makes it seem. Online hacking groups, such as Anonymous and Lulzsec, have raised the level of technical proficiency in executing malicious exploitation to epic levels. Groups such as these have been employing their skills to protest global politics, attacking just about anyone and everyone in a haphazard leaderless way. But what lies beyond "malicious" exploitation? Can we reasonably label what's beyond malicious - "nefarious" exploitation?

For example, attacks such as the Stuxnet worm have become infamous. This worm contained not just one zero-day exploit, but four. A "zero-day exploit" is exploit code that has never been seen before by the cybersecurity industry. Most virii contain well known exploit code. New viruses will understandably contain a zero-day exploit, but never four! Moreover, the Stuxnet worm was remarkable in other ways. It was ingeniously designed to specifically attack industrial controls in the Iranian uranium processing plants, sending centrifuges spinning out of control, while reporting to monitors "all is fine". A new threat exists called "Duqu" which shows evidence of re-using Stuxnet code, albeit with new, never seen zero-day exploits of its own. Indeed the internet is a dangerous place.

If the internet is this 'wild-west' I've described above, what is Western's networking environment like? To answer this I am reasonably certain of two things; first, people at Western generally believe it to be safer than it actually is (in-other-words, there is a tendency to underestimate the risk), and second, if something is seen on the internet, it is seen at Western.

Western's eWellness Campaign

On the first point, we've just completed a Western eWellness Campaign that saw efforts to raise awareness about the risk. This campaign saw the distribution of posters, some of which are being displayed on the Visix screens around campus. (Fig. 1 on page 5 is one of the posters.) Articles appeared both in on-campus news, and off-campus news. Although by general acclamation the campaign has been a success, the proof will be in the pudding so-to-speak. If the number of phishing attempts being reported to ITS, or the number of folks falling victim drops, indeed the campaign will have been a success.

Service Protection

On the second point, a bit more needs to be said. We're countering the risk to the campus through an effort called Service Protection, which is really just a fancy way of saying "more effective use of our firewall". There's background here, which a few stats help to illuminate. Looking at a report about a single machine on our network, from June 16, 2011 when the campus is generally "slow", I can see that this particular machine was first probed by 42,794 TCP connection packets, likely trying to see what services that machine was listening

on. In other words, this was a probe. The "Remote Desktop Protocol (RDP)" port was open, so the machine then experienced 35,391 separate remote login attacks. (It also experienced 24,366 attacks on its "Secure Shell (SSH)" service, as well as 23 or so additional attacks). This was one machine, and typical.

Throughout the summer, Western and affiliated colleges experienced on average 1.5 million attacks per day on the RDP port, and just over a million attacks per day on the SSH service. The attacks on the RDP port can likely be explained by the existence of the "Morto" virus which targets RDP; so most were likely automated attacks. However, these attacks were still effective. One department had 4 separate machines exploited in a 3 day period, after having already been exploited the previous week.

We're mitigating this risk by changing our security posture to restrict access to all non-essential ports from off-campus. We have been closing off RDP, moving access to this service behind our Virtual Private Network (ROAMS) for the better part of two years now. Systems and Network administrators have been engaged via TUMS (<http://www.uwo.ca/its/tums/>), and Deans initiate this process for their segment of the network. We are 66% done. The first 1024 ports will be mostly restricted before December, excepting a few "high-traffic" ports such as port 80, which is used for web. Already announced to the TUMS group, we'll be closing off port 22 (SSH) access sometime next summer, so people are making arrangements to transition to another port. This

continued on page 5

The Open Experience - GNU/Linux on the Desktop

Paul Lukasewych <plukasew@uwo.ca>

Every couple of years, I have tried out the latest and greatest GNU/Linux and each time reached the conclusion that Linux hadn't quite arrived yet. I would go back to Windows, or more recently, to the Mac. However, this changed about a year and half ago when I tried it once more and felt that it was time. I switched slowly at first, dual-booting my MacBook, just in case. Next came a pure Linux desktop machine at home, and as of a few weeks ago, I'm running Linux here at work as well.

The motivation for my switch at work was a practical one. I've started working with Sakai, Western's new open source LMS and decided to try Sakai in Linux. I installed Linux on a virtual machine, and the Sakai installation went smoothly. As a result, I have dual-booted my Mac Pro with Linux as my primary operating system.

My distribution of choice is Kubuntu, which is a flavour of the popular Ubuntu distribution running

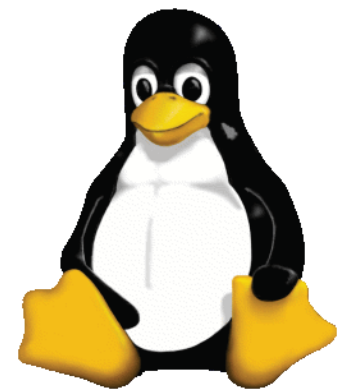
the KDE desktop environment. On the surface, KDE has a lot of similarities with Windows, but I use it because it aims to be a complete, integrated environment, with "official" applications for most tasks.

Of course, you're free to use any applications you like, but I like the integration that the KDE applications offer, and I use them when I can. As a Java developer, the tools I use to do my job are for the most part cross-platform; this has made the transition relatively painless for me.

When people find out that I run a Linux desktop, they often ask me why. The simple answer is that I believe in the ideals and the community surrounding free and open source software, and I want to be a part of that. But there are more practical reasons as well. There are tools and features in Linux that aren't available on other platforms, which benefit my productivity both as a software developer and as a computer user

in general. The software repositories make finding, downloading, and installing applications a breeze. I have yet to find the need to modify any Linux software, but the option is there should a need arise. And finally, it is hard to argue with the price: no license fees, no upgrade charges, and a wealth of free applications just a click away.

Desktop Linux is finally ready for me. Maybe it's ready for you too.




continued from page 4

process of protecting services has not been without difficulty, but we are starting to see evidence of success. The numbers of RDP attacks have started to diminish, and the number of machines reported to us as successfully exploited via that service has also dropped.

The internet may be a dangerous place, but knowing about the risks and dealing with them is at the heart of cyber-security.

password:



!

**DON'T GET
BIT**

AVOID EMAIL SCAMMERS.
NEVER, UNDER ANY
CIRCUMSTANCES, EMAIL
YOUR USERNAME AND
PASSWORD IN RESPONSE
TO AN EMAIL REQUEST.

The University of
Western Ontario

eWellness wellnes.uwo.ca

Instructional Support Team News

Sakai New LMS

Deanna Grogan
<owflightplan@uwo.ca>

The OWL has landed and Sakai has been selected as the new learning management system (LMS) for Western. This open source LMS is developed and supported by more than 350 educational institutions worldwide. WebCT, the online learning environment currently used by Western faculty, staff, and students since 1998, will not be supported after January 2013.

Longsight - Commercial Affiliate

Western has contracted Longsight, a Sakai Commercial Affiliate, to assist with implementation of the new Sakai OWL. Longsight has been working with Sakai since 2001 and will assist Western with piloting, training, course migrations, and re-development of Western specific tools and services.

January Pilot

The new OWL environment will be piloted in January 2012. The pilot will include 12 courses, 14 instructors and about 1000 students. This small pilot will allow the instructors and the project team to evaluate tool functionality, course/content migration, enrollment processes and student success. Additionally, this time period will be used to prepare training and documentation in preparation for the new Sakai OWL environment being rolled out to the rest of campus.



Project Timeline

The OWL Flight Plan project was initiated in Spring 2010 to evaluate the campus requirements for the new version of OWL. The small January pilot will be followed by a larger summer pilot, beginning in May and involving all spring/summer face-to-face and distance courses. By September 2012, all WebCT courses will be migrated to the new OWL and WebCT will be decommissioned in January 2013.

Training and chances to test-drive the new OWL will begin in January so keep an eye on the OWL Flight Plan project website (<http://webct.uwo.ca/owflightplan/>) for updates and opportunities to participate.

ITRC News

Merran Neville <mneville@uwo.ca>

A selection of projects completed by the ITRC are now available as short descriptive videos. The videos provide an overview of the project including the goal and purpose of the project, technology used, and time to complete. The seven videos can be viewed on the Western channel on YouTube in the ITRC playlist at: <http://www.youtube.com/playlist?list=PL9CFD1DB13C03AAEE>

More will be added in the future. If you are considering bringing an instructional academic project to the ITRC, these short videos will give you an idea of what is possible.

Five of our faculty partners are interviewed on the "Spotlight" page at <http://itrc.uwo.ca/spotlight.html>. They are Dr. Marjorie Johnson, Dr. Tim Wilson, Ms. Kim Luton, Mr. Tom Haffie, and Dr. Khadry Galil.

The migration of courses from WebCT to Sakai will begin with the January pilot and the ITRC student consultants will be fully involved in this project. This includes assisting with the migration of courses, training, and developing documentation.

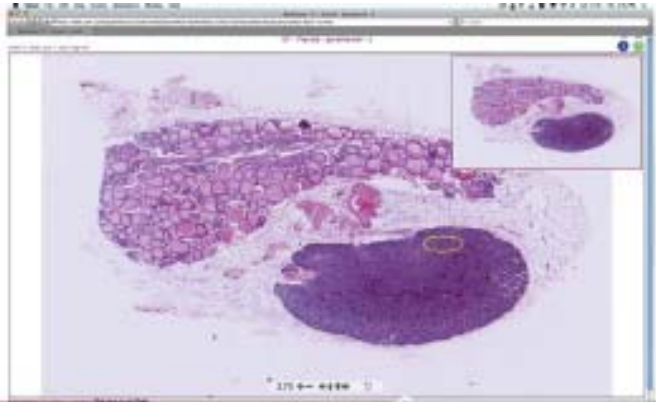
In case you didn't know, the ITRC covers the Help Desk phone from 4:30-10:00pm weekdays and from 2:30-10:00pm Saturday and Sunday. The coverage is to provide support for WebCT. To get help at these times, call 519-661-3800 ext.83800.

The photos on pages 2 and 3 were taken by Samantha Munro, ITRC.

ITRC Projects on Western's YouTube Channel

Playlist: <http://www.youtube.com/playlist?list=PL9CFD1DB13C03AAEE>

1. Slidebox - 1:17 mins



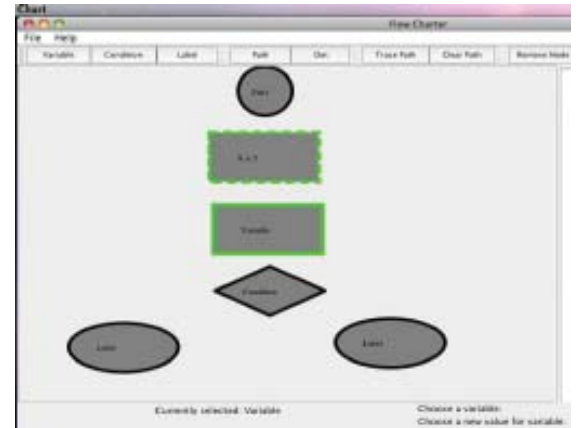
2. Scrubbing, Gowning, and Gloving - 4:58 mins



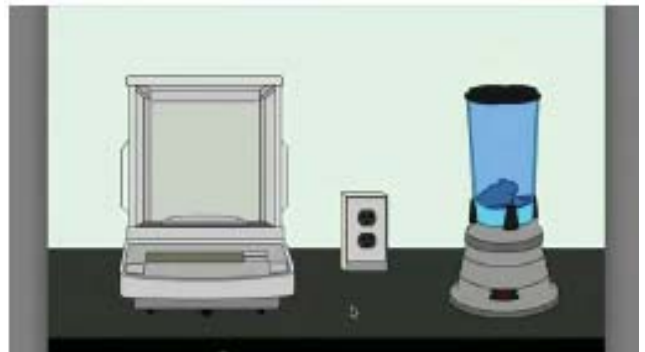
3. Strategy Bytes - 1:31 mins



4. Flowcharter - 1:31 mins



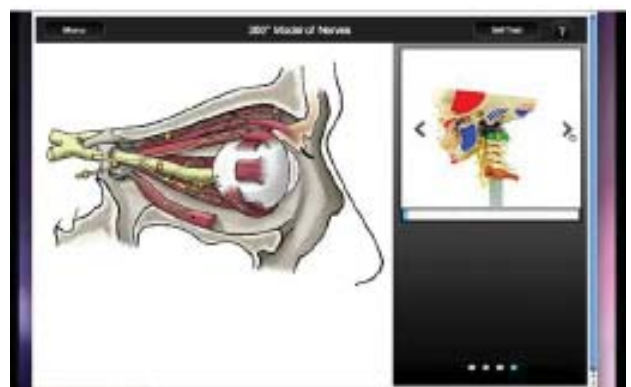
5. Virtual Biology Lab - 1:38 mins



6. RealXtend - 1:28 mins



7. Cranial Nerve Quizzes - 2:24 mins



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ITS Information

Network Backup Service

For network backup and recovery service, please contact the ITS Legato Group:

Email: legato@uwo.ca

Web: <http://www.uwo.ca/its/network/backup.html>

ITS Open Hours

Building hours and hours of opening for the various areas of ITS are listed on the web at the following location.

Web: <http://www.uwo.ca/its/about-its/hours.html>

ITS Mission

We are committed to delivering the best information technology services and solutions in support of the teaching and research missions of the University.

ITS Vision

To be recognized as the preferred source of information technology services and solutions within the campus community and recognized as one of the leaders in the North American university community.

Commonly Used Numbers

ITS Customer Support Centre	519 - 661 - 3800	ext. 83800	http://www.uwo.ca/its/helpdesk/question.html
Voice & Data	519 - 661 - 3800	ext. 83800	http://www.uwo.ca/its/telecom/tele-install.html
Administration Office	519 - 661 - 2151	ext. 82151	FAX 519 - 661-3486 ext.83486
Computer Accounts Office	519 - 661 - 3800	ext. 83800	accting@uwo.ca
Computer & Network Operators	519 - 661 - 3525	ext. 83525	operator@uwo.ca
ITRC	519 - 661 - 2111	ext. 85513	itrc@uwo.ca
ITS Non-Credit Courses	519 - 661 - 2151	ext. 82151	its-courses@uwo.ca
Dial-in Line (all modem speeds)	519 - 640 - 5305		
E-mail Postmaster	519 - 661 - 3800	ext. 83800	postmaster@uwo.ca

Facilities

ITS Support Centre	SSB 4100	General Purpose Labs:	
ITS Training Lab	SSB 4230	NSC - 110	NCB - 105,
ITRC	SSB 4320	SH - 1310	HSB - 13, 14, 16
			SSC - 1000, 1012, 1032

