Instructional Support Team News
ITS Instructional Support Team <its-owl@uwo.ca>

One year ago, twelve second term courses ran in the new OWL as a pilot. Since then much has been learned about the new learning management system (LMS). This information has been shared with instructors through training sessions, consulting over the phone, in person assistance in the ITRC, and through the OWL Documentation site. This site is a rich resource of content mostly written by the ITRC student consultants. If you haven’t already discovered it, you can access it after you login from your “My Workspace” tab.

First term in fall 2012 saw all credit courses offered in OWL. At the end of term the export of grades from the OWL gradebook was thoroughly "tested" by the many staff who perform this important task. During the term, regular training sessions on the Grade Export process were offered to prepare staff for this activity.

As one of the final steps in Western’s migration from WebCT to Sakai, on Sunday, 10 February, 2013, WebCT will be transitioned to archive mode. All content and data will be maintained but access will be limited. Please contact us at owl@uwo.ca if you find that you need to retrieve content from an old course area or need course content migrated to OWL. In this case, please include the course name/number/year.

NOTE for Grade Admins
If you need to be enrolled in courses for this term in preparation for submitting grades, please email owl@uwo.ca with your request.

OWL Tips
Here are a couple of helpful tips to make using OWL easier.

When you want to see exactly what your students (in a course site) or those with access (in a project site) see, enroll a second email account for yourself, for example a gmail.com email address, as a student in your course. Then you can login with this account and see exactly what your students see. The first time you enroll your second email address in OWL, the system will send you an email to that email address. The email contains a link which you use to create your account and password for the OWL LMS.

Secondly, it is important to know that all Course sites must have at least one instructor enrolled and one staff member as a grade admin for grades to be submitted and approved. The “Approve” step sends the grades to the Office of the Registrar.

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About In Touch

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Editor: Merran Neville

The purpose of In Touch is to inform our users about activities and events of Information Technology Services.

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We welcome your comments, suggestions, and articles.

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Web: http://www.uwo.ca/its/

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

Welcome to the New
OWL
(Powered by Sakai)

Find your courses here:
HTTPS://OWL.UWO.CA
ITRC News

Last year, the ITRC was fully occupied with migrations but these are mostly complete at this time. Supporting the new OWL also meant ITRC resources were focussed on training and consulting. Consulting continues to absorb a lot time but time is now available for projects. If you have something in mind, please come to us to discuss your ideas. We are ready and eager to take on new projects. Current projects in the ITRC come from Western Libraries, the Faculty of Engineering, the Psychology Department, and the Student Development Centre.

We can help design and work with you to fully develop your course in OWL and include the tools available to help increase the learning experience of your students.

e-Learning at Western
e-Learning is a hot topic at Western and two committees are currently working on initiatives to further its use. The Technology in Education Symposium (TIES) at Western will be held on Friday, March 8, 2013 at the Faculty of Education. For information about this symposium, visit the web at http://www.ties-at-western.com/

The Fellowship in Teaching Innovation is open to applicants until March 1, 2013. Details about this award is provided on the Teaching Support Centre web site at

http://www.uwo.ca/tsc/about/features/fellowship_teaching_innovation/

TUMS Celebrates 20th Anniversary with cake!

TUMS (IT Users Managers and Support Staff ) is an established group that has been meeting regularly since 1992. ITS works with TUMS to provide an important forum in which faculties and units across campus can share information and collaborate on issues that affect the campus computing and networking environment.

TUMS meetings are scheduled approximately every second month and special-purpose task teams are struck when appropriate. Broad participation from campus is encouraged.

For more information about TUMS, please visit http://www.uwo.ca/its/tums/
Cellular Tips & Tricks
Mona Brennan-Coles <mona@uwo.ca>

Cheapest is not always best
_If it’s too good to be true, it probably is!_ We have learned to avoid phishing and smishing scams and beware of other “opportunities” presented to us.

Deciding on the “right for you” cellular device is much less clear. What do you want to use it for? Email? Texting? Web surfing? Telephone calls? All of these?

After you have decided on Operating System and a Carrier, the next step is to choose your device. Compare devices and select the one(s) which provides all the features and services you need/want. If there is more than one suitable device, then narrow your choice by considering ergonomics e.g. touch screen versus keyboard; device size. If you still have more than one device to choose from, then consider price. This is an opportunity to consider needs versus wants. A “free” device isn’t a good choice if it doesn’t do everything you need it to.

Now that I have my new Smartphone, what do I do?

**Voicemail Setup:** The carrier will give you a temporary password that you will be asked to change during setup. You will also be asked to record your name and given the opportunity to record a personalized greeting.

- _TIP:_ If you decide to record a personalized greeting, write out what you want to say so that you can record it in one try.

**Email Setup:** Setup your email account(s) and test to make sure that you can send and receive.

- _TIP:_ Consider whether or not you want your signature to advertise the device you are sending from e.g. “From my iPad”.

- _TIP:_ You may be able to customize your signature for each email account. If you can’t, consider the best “generic” signature e.g. “Mona Brennan-Coles”

**Wireless Setup:** Connect to any wireless networks as you encounter them.

- _TIP:_ Consider whether you want to use WiFi preferentially. Your choice will be influenced by WiFi availability and your cellular data plan.

**Check your first bill carefully:** Confirm that the monthly charges and any credits you are entitled to are correct. If you have any questions and/or there are mistakes, contact your carrier quickly.

**iPhone 5 & 3G/LTE Switching Issues**

Some iPhone 5 users are experiencing issues with switching back to 3G from LTE, regardless of carrier or country. Several Western users have experienced this; particularly in and around the Support Services Building. At the moment, the only known fix is to turn Enable LTE to OFF (in Settings, General, Cellular). If this doesn’t work, there may be an issue with your SIM card and/or your iPhone 5.

ITS Non-Credit Computer Courses

Courses offered in the Winter/Spring 2013 session include MS Office 2010 Access, Excel, PowerPoint and Word, as well as Acrobat and PhotoShop.

Details online at: [http://www.uwo.ca/its/courses/](http://www.uwo.ca/its/courses/)
Security Team News
Jeffrey Gardiner <gardiner@uwo.ca>

Trends 2012
Looking back at trends in 2012 in information security there are a number of observations we could make. These observations are generally recognized to have been true across the board in industry and government, yet I can attest that they are also true at Western. Here are some reflections then on what we’ve seen at Western.

1. Breaches are now considered unavoidable. Engineers in industry look statistically at failure rates. For example they look at mean time between failures, as well as the probability of some process producing a flawed product. In software engineering there is a recognition that no software is without fault. Even when systems are patched, patches can introduce faults, just as they can correct them. When we see exponential growth in the number of attack attempts against our systems, there will be some probability that a small portion of these attacks will be successful. Perhaps they’re exploiting vulnerabilities unknown to the computer security industry. These exploits are called 0-day exploits. To say breaches are unavoidable is to say the probability is something above 0. Even without a statistical probability due to faults in the system, there are still faults introduced by ‘human factors’ that likewise introduce exploitable weaknesses.

2. Cyber Espionage continues. People see the word ‘espionage’ and think of agents working against a nation-state, but in fact people working against the interests of a business also count. What does this mean to Western? Western is in the information business. We do research, we teach. I can attest, our information assets absolutely are the target of such efforts. We have research at Western people would like to get their hands on. We have other assets as well. Has anyone wondered why their credentials are so highly sought? To see the efforts being spent to harvest Western credentials, one need only go to: http://www.uwo.ca/its/accounting/official-email/phishing/

Once credentials are harvested they are used to access privileged resources only available to the Western community; resources such as online journals available through the library. When they do this they engage in an attack of sorts, stealing gigabytes of data illegally, and Western pays a cost. Sometimes we lose access to these online journals which denies the Western community access.

3. Mobile malware continues to increase. Mobile malware has been seen attacking the android operating system, but likewise the android operating system has also seen much more effort in protective measures. Although mobile malware gets headlines, its impact to date has been minimal as it is less likely the information kept on mobile devices rather than desktops has financial value.

4. Mobile devices are getting better anti-theft protection. This is true outside of Western too, but we’ve certainly seen evidence of it here.

5. The Spear-phishing epidemic continues; it used to be the bulk of phishing attacks were sent under the pretext of being some nebulous Western service desk seeking your usernames and passwords even though Western’s ITS already knows your usernames and would only require your password with your cooperation (physically at the helpdesk). People report these efforts to Western. Now, however, we’re seeing many more attacks appearing to come from LinkedIn and Facebook. These attacks are much more believable and are having success (they lead to additional attacks). I wrote a whole In Touch article on phishing recently. (See “Security Team News”, Vol. 18 No. 4., page 4.)

6. Social Engineering attacks often start off with targeted spear-phishing attacks, above. Once even a tidbit of information is known about a person, social engineering greatly increases the chances of obtaining additional access to resources the attacker shouldn’t have access to. Imagine a researcher getting a call from someone saying “Hello Dr. Jones, I’m calling on behalf of Dr. Bloggins, your collaborator on project XYZ. He is currently travelling but wanted me obtain your preliminary results on protocol A.”

Most social engineering is not about research but about identity theft and money. We have had employees of Western lose their identity, and bank accounts. These are criminal matters.

7. Botnets have infiltrated both Reznet and research networks. Many machines that become virus infected join Botnets through self-identification, where they then become remote nodes used to attack further machines or to send spam. We have been denying bot-net machines network access in record numbers recently, in part because the Government of Canada has resources that help us identify infected nodes. The Government of Canada has the ability to see what machines (in Canada) are ‘joining botnets’ and they share that information with us. Because it is credible information, network
and system admins have been responding positively when we identify machines they manage that are being remotely controlled.

8. Breach notification outside of university environments is increasing. In the US there is increasing state governed legislation requiring notification. This trend is true in Canada too though it isn’t being driven by legislation. However, in speaking to other Central Information Security Officers at universities across Canada, we haven’t really seen an increase in this on campus. There is still resistance in sharing breach information with central business units such as ITS, and the reason is not clear. Being able to discover avenues of attacking vulnerabilities means centrally we can implement safeguards that protect all.

9. Critical Infrastructure attacks are happening increasingly. Because of the Stuxnet virus attacking industrial controls, and increasingly network connected devices, we are seeing attacks targeting untraditional devices, including critical infrastructure. Consider that at Western we have rolled out Voice over IP phones, and IP based clocks. We have also seen the network become something of a power distribution system through Power over IP. So it’s not surprising then critical infrastructure has joined the ranks of network connected resources being targeted.

Looking back at Information Security trends in 2012 we see how the ‘threat’ has evolved its technique and broadened its breadth of target. Western’s defensive strategies also continue to evolve to meet these threats and challenges. Given these trajectories in the struggle to protect information assets, there is little doubt 2013 will be an interesting year.

The Open Experience: Emacs
Paul Lukasewych <plukasew@uwo.ca>

There are quite a few good open source text editors out there, and you should be using one if you’re not currently doing so, as they are all certainly much more powerful than the default editors that come with Windows and OS X. I’m going to talk about Emacs, my editor-of-choice these days.

The reason I decided to learn Emacs was because I wanted a single editor that I could use everywhere. Emacs has been around for a very long time (it is currently at version 24!) and is available for just about any system. Couple this widespread availability with the fact that Emacs has both command-line and graphical interfaces, and you have a pretty universal editor. I use it on my desktop to do things like write this column, and I also use it to edit configuration files on remote servers. I only need to learn one set of commands and I can edit text wherever I go.

To be perfectly honest, learning Emacs is pretty hard if you’re used to one of the simpler text editors. It took me quite some time to learn the parts of it that I do know, and I’ve barely scratched the surface. Getting started is easy though, just launch Emacs and type in some text. Then press Ctrl-X, then Ctrl-C. This is the exit command, and it will prompt you to save your file. Once you master that command, you can add pieces to your Emacs repertoire one by one at your own pace. For new users, I highly recommend downloading and printing an Emacs command reference card, which can be easily found online. I keep the card handy near my keyboard.

Emacs is known for being able to do just about anything, but I won’t go into all the crazy things it can do like manage files, check email, or even play Tetris. I do use it to manage my to-do list, which is done using a nice feature called Org-Mode.

Looking at it purely as a text editor, I have really grown to appreciate a couple of features lately. The first is the kill-ring, which is a weird name for the clipboard functionality that lets you retrieve any text you have ever copied. The second is keyboard macros, which let you record keystrokes and play them back as many times as you like. Macros are perfect for making a complicated edit to one line in a file and repeating it for all the rest of the lines.

That’s just the tip of the Emacs iceberg. If you’re interested in learning more about Emacs, check out the links below. (Fair warning to Windows users: setup may be more difficult than you are used to.)

https://www.gnu.org/software/emacs/
http://orgmode.org
http://aquamacs.org
http://www.emacswiki.org/emacs/CategoryWThirtyTwo/
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

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<th>Service</th>
<th>Phone Number</th>
<th>Extension</th>
<th>Web Address</th>
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<tr>
<td>ITS Customer Support Centre</td>
<td>519 - 661 - 3800</td>
<td>ext. 83800</td>
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<td>519 - 661 - 3800</td>
<td>ext. 83800</td>
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<tr>
<td>Administration Office</td>
<td>519 - 661 - 2151</td>
<td>ext. 82151</td>
<td>FAX 519 - 661-3486 ext.83486</td>
</tr>
<tr>
<td>Computer Accounts Office</td>
<td>519 - 661 - 3800</td>
<td>ext. 83800</td>
<td><a href="mailto:accting@uwo.ca">accting@uwo.ca</a></td>
</tr>
<tr>
<td>Computer &amp; Network Operators</td>
<td>519 - 661 - 3525</td>
<td>ext. 83525</td>
<td><a href="mailto:operator@uwo.ca">operator@uwo.ca</a></td>
</tr>
<tr>
<td>ITRC</td>
<td>519 - 661 - 2111</td>
<td>ext. 85513</td>
<td><a href="mailto:itrc@uwo.ca">itrc@uwo.ca</a></td>
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<tr>
<td>ITS Non-Credit Courses</td>
<td>519 - 661 - 2151</td>
<td>ext. 82151</td>
<td><a href="mailto:its-courses@uwo.ca">its-courses@uwo.ca</a></td>
</tr>
<tr>
<td>Dial-in Line (all modem speeds)</td>
<td>519 - 640 - 5305</td>
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<tr>
<td>E-mail Postmaster</td>
<td>519 - 661 - 3800</td>
<td>ext. 83800</td>
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Facilities

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General Purpose Labs:
- NSC - 110
- SH - 1310
- NCB - 105,
- HSB - 13, 14, 16
- SSC - 1000, 1012, 1032