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Dave Loveless Staff Award 2014
Merran Neville <mneville@uwo.ca>

Each year, a number of ITS staff are nominated for the Dave Loveless Staff Award and each one is well deserving to receive it. This year, the following staff were nominated: Andrew Culver, Andrew Filippi, Jared Grywacheski, Rich Jones, Lloyd Mills, Karin Palmer, Nick Pasierbek, and Heather Woods. It is indeed very special to be nominated by fellow staff who recognize the contribution each person has made to the department.

Rich Jones is the 2014 recipient of the award. The following was said about Rich by his nominators:

“Rich has consistently provided lucid, circumspect guidance to the UNIX team here at ITS as well as being an excellent liaison between Thugs and other teams/units like WISG. His clear-headed, no-nonsense approach to problem solving, both political and technical, has served as a model for the rest of the team. Although he has shunned the official title of team leader, he is de facto the team’s mentor and keeper of archival knowledge. Rich exemplifies what it is to be a great system administrator. He is dedicated and very knowledgeable; not constrained by preconceived notions.

Rich has brought us through several incarnations of the virtual environment we work in. Through his guidance, we have seen the UNIX environment grow from a server to a network of servers optimized for specific functions, network attached storage, automated outage alerts, an enhanced email system, revision control, improved team communication, centralized logging and the maintenance of standardized procedures to ensure high availability, rapid

(Note: Nancy Wellard, Manager Technical Support - Server Support & Computer Accounts; David Ghantous, Assoc. Director, Technical Services)

(continued on page 3)
About In Touch

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Phone: 519 - 661 - 2151
FAX: 519 - 661 - 3486
Email: in.touch@uwo.ca
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://itshelp.uwo.ca/

How to contact the ITS Help Desk:

Web page: http://www.uwo.ca/its/helpdesk/
Phone Number: 519-661-3800 ext.83800
Webform: http://itshelp.uwo.ca/
In Person: Support Services Building, main floor room 4100
  Hours: 8:30am - 4:30pm weekdays
Support by Phone: Mondays - Thursdays: 8:30am - 10:30pm;
  Fridays: 8:30am-4:30pm; Sundays: 4:30-10:30pm

Other Help:
How do I ... documentation: http://www.uwo.ca/its/hdi/
Twitter: http://twitter.com/westernhelpdesk
  Ask ITS: http://askits.uwo.ca/
deployment, and effective team collaboration. Together with others, Rich played a major role in introducing Western to the Internet and seeing that we became a part of it. He has consistently underscored the importance of security and as a result of his enthusiasm in this area our department now has a full time CISO and a dedicated security group.

Rich has been quietly innovating here for decades and has gone largely unrecognized, partly due to his modesty, partly due to this unobtrusive manner in which these innovations are introduced. Very few people notice that we are almost invariably “up”, and even fewer know that you can thank Rich Jones for that.

Congratulations, Rich!


ITS is participating in the Global Corporate Challenge which is a workplace health and well-being program aimed at changing the behavior and improving the health of employees around the world. This year there are 282,576 participants on 40,368 teams from 158 countries competing in a virtual race around the world.

ITS team members are Sarah Hodgson, Martin Douglas, Betty Poots-McGaw, Colin Gallagher, Bill Adams, Jeff Grieve, and Dan Blumas.

Information about the Global Corporate Challenge is available on the web site: https://www.gettheworldmoving.com/
Treat your password like your toothbrush -- never share it and change it often!

Your Western User ID and password provide you access to many of the resources you use at Western. If someone else has your Western password, then they have your Western Identity. This means they can access your email, files, pay information, or grades.

Consider the following:

- Passwords are often obtained without the knowledge of the victim, and phished or stolen passwords often are not used immediately. They are collected, sold to organized crime, and can be left unused for some time. Even if you're not aware your password was compromised, if you change it periodically you may change it before a thief has an opportunity to use it.
- It is possible for hackers to guess your password through sheer persistent effort. With current technology, this can take months if you have a strong password. If you change your password frequently, any brute force attack that takes longer is ineffective.
- You should change your password immediately if you have any reason to believe that someone else has access to it or you suspect your Western account has been compromised.
- If you have not changed your Western password in many years, chances are it does not adhere to our existing more complex password requirements that are harder to guess. This policy includes the use of a mix of upper and lower case letters as well as numbers and symbols.
- Use a different password for your Western Identity than you use for other accounts you own (personal email, banking, etc). This way, if one of your passwords is compromised, the access the thief has to your accounts is limited.
- Keep your password secret. Do not share it, do not write it down. If you need help storing your passwords look to available tools like Password Safe to securely store them.
- Change your password frequently – at least every 6 months.

For further details about your Western Identity and instructions on how to change your password, please visit the following websites:

- [http://www.uwo.ca/its/westernIdentity.html](http://www.uwo.ca/its/westernIdentity.html)
- [http://security.uwo.ca/prevention/securing_devices/secure_passwords.html](http://security.uwo.ca/prevention/securing_devices/secure_passwords.html)

If you require further assistance, please contact our ITS Help Desk by calling ext. 83800 from on campus or 519-661-3800 from off campus.
We are well into 2014 and I want to share what is happening with respect to Information Security that should concern the Western community.

We call this age The Information Age. It is a grand label and appropriate because increasingly what happens on the Internet and in cyberspace reflects reality. If it is true that life imitates art, it is also true that cyberspace imitates life.

Commerce once required consumers to go to physical storefronts to purchase physical goods. Political protestors would express political displeasure by physically attending real world events protesting with real signs. Courtship in romance took place in public settings, with prospective mates meeting in roller-derbies, church picnics, discothèques, etc.; no longer.

Consumerism has invaded cyberspace with a vengeance. In 1995 the US National Science Foundation lifted its former prohibition of commercial enterprise on the Internet and now approximately 86% of us in North America have made purchases virtually (without attending an actual store). The amount of dollars exchanged in this manner is staggering! Political protestors have now expressed their political displeasure in virtual ways; I’m thinking of Anonymous and Lulzsec. Courtship in romance has also shifted to our virtual environment. We have re-created a reality in the image of real life.

These observations are interesting, but what’s the point? I have two: Just as our human interactions have become reflected in this virtual world, so too have our identities. If human interactions have become reflected in this virtual world, so has the darker side of these interactions.

There has always been evidence of identity theft throughout human history. For example, the biblical patriarch Jacob became his brother Esau in order to fool his father Isaac [Genesis 27]. Becoming someone else in real life is surprisingly difficult, but people have done it. However, in the virtual world where fewer unique attributes exist to fully define a person, identity theft is easier. The consequence of stealing someone's identity is no less costly. So is there incentive to steal someone’s identity?

Identity theft is only one type of virtual crime; are there other types? Unfortunately, yes. There have been cases of (virtual) property theft. A video game called EVE has set a number of historical firsts for having ‘in-game’ assets worth over $75,000 (real world dollars) stolen (the largest heist in Eve’s history). This story involving the heist of a virtual corporation called ‘X-Trading Corp [XT]’ blurs the distinction between real world and virtual crime (because EVE is a game). Other real world crimes in virtual space are less ambiguous, such as the collapse of two of the World’s largest ‘Bitcoin’ exchanges - Mt. Gox and Fort Knox. In these cases, bitcoins worth approximately $460 million were stolen.

So if crime is taking place in virtual space, against real and virtual world assets, involving real, virtual and/or stolen identities, shouldn’t that be where we look for clues?

Western’s infrastructure represents a fairly large footprint in the virtual space of the University we all know and love. Western is very much in the ‘information business’ with its research and teaching. This means that one of our largest assets, ‘information’ sits squarely within the virtual space and represents a target of very great value.

Each day our University comes under attack by millions of low level threats. Each year it comes under attack by higher and more sophisticated threats including organized crime, and foreign governments targeting our community or research. Accordingly, Western is looking at keeping up with its defenses.

Digital infrastructures already create massive repositories of meta data such as logs and files documenting digital events. Therefore, digital infrastructures already contain clues about attacks against our information assets, but these clues are buried and hidden in the massive amounts of data collected. Finding them in a timely manner is difficult. However, tools exist which can help. One such tool is a ‘Security Incident Event Management’ tool, or SIEM which examines diverse data sets and discovers correlations between them (such as correlating network behavior seen by a firewall, with a corporate anti-virus solution to infer a virus or botnet infection).

Working with its administrative units and faculties, Western has decided to pursue the acquisition of a SIEM as a capital project to bolster our ability to understand what is happening in our environment, in a timely manner. This decision has not yet resulted in a procurement, but it is exciting, and it illustrates Western’s commitment to protecting its research, its community, and its business information and privacy. Western is making strides to stay at the forefront of its thinking in many areas including protection of critical infrastructure. This forward thinking illustrates Western’s commitment to being a world class university.
Extending Battery Life on Mobile Devices: Part 2 -- Android Devices

As our mobile devices (tablets, smartphones) do more and more, they require more power which shortens battery life. If you never or rarely use a feature, turn it off and save your battery for those features you can’t do without. For me, that means leaving Bluetooth on because I use it in my car and turn off AirDrop because I never use it.

Regardless of the device type, look for a battery case (i.e. charger) to protect your device and extend usage time. There are also lots of options for portable battery packs that will provide charging on the go.

In the Spring 2014 In Touch (Vol. 20 No. 3 page 5), I talked about how to save battery power on iOS devices. This following information provides tips for extending your Android device battery life.

- **Learn what is using the largest percentages of power** in Settings > Battery. If you don’t use a power hungry app, turn it off or uninstall it. If you rarely use a power hungry feature, turn it off.
- **Reduce polling in your messaging apps** (e.g. Email, Facebook, Twitter). You will significantly increase your battery life by setting polling to “manual” or reducing the frequency.
- **When no coverage exists, switch to Airplane Mode**. Don’t forget to switch Airplane Mode off when you are back in a coverage area or you may miss important calls and messages.
- **Turn off Location Services** either completely or for selected apps.
- **Update to the latest software** to ensure that you are able to take advantage of the latest power savings and security features.
- **Update your apps** to ensure you are taking advantage of any power saving features that have been added.
- **Close apps running in the background** in Settings > Apps.
- **When you are buying an Android device, check the reviews** because results vary between devices even phones on the same network.

Additional information can be found at:

- [http://www.pcmag.com/article2/0,2817,2367542,00.asp](http://www.pcmag.com/article2/0,2817,2367542,00.asp)
- [http://www.wikihow.com/Save-Battery-Power-on-an-Android](http://www.wikihow.com/Save-Battery-Power-on-an-Android)
- [http://www.androidpit.com/how-to-save-battery-life](http://www.androidpit.com/how-to-save-battery-life)

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**Western Mobile Apps**

*Martin Douglas <martin@uwo.ca>*

ITS and Communications & Public Affairs are currently engaged in a project to build Western a new mobile application to replace the iWestern app. We have partnered with DivergentSoft Technologies, a London-based mobile development company and expect to have an initial release ready by September for the start of the semester. This initiative is the beginning of an effort to give Western a more modern application that accesses more relevant and personalized content.
Virtual Desktop Infrastructure @ Western

Nancy Wellard <nwellard@uwo.ca>

By definition, Virtual Desktop Infrastructure (VDI) is a client/server model where a desktop is displayed on a “client” but the resources that actually run the desktop are located on a remote server.

At Western, the clients for VDI are either Windows computers (PCs) or zero clients and the desktops run on servers located in the ITS central data centres. Zero clients do not run any local operating system or local software. They are completely dependent on the central servers to provide the desktop and applications.

The main advantages of implementing VDI and zero clients include the following:

• Reduced power usage
• Efficient and secure methods to centrally deploy desktops and applications
• Reduced cost for client devices as initial costs are lower and the life span is much longer than a traditional PC

In January 2013, ITS and the Faculty of Engineering worked together running a pilot across three student computer labs to evaluate VDI. At the end of April, the pilot was found successful and by September 2013 we expanded the use of VDI to all but one of the ITS managed student computer labs - in total approximately 400 virtual desktops. Also, over the fall and winter terms last year, we ran small pilots within the Taylor, Law, Weldon, Education, and Music libraries, and in the Valberg Educational Resources Centre (VERC) in Schulich.

During summer 2014 the VDI project team is focusing on the following work:

• Additional deployments of VDI to the remaining desktops within the VERC lab as well as a second lab in Schulich, the remaining stations in Taylor, Law, Weldon, Education, and Music libraries, a lab within Nursing (Health Sciences), and labs within both Huron College and Brescia College.

• Expand supporting infrastructure and implement methods to enhance performance.
• Research ways to better support applications that require high performance graphics. This should allow us to deploy VDI within the final ITS managed lab located in NCB. We also hope that this research will lead to a solution to allow support of specialized applications used within the Faculty of Engineering.

Currently, our focus is on the use of VDI within student labs. As we move forward, we will look to future opportunities to implement this technology in other areas at Western.

If you have any questions or would like further information, please contact Nancy Wellard <nwellard@uwo.ca>.

VoiceMail to Email Service

Anna Dorobek <adorobek@uwo.ca>

Western University has embarked on a significant upgrade to the telecommunications infrastructure. This has enabled Western to take advantage of many VoIP applications and services. We are now in a position to offer one of these services to our community.

The VoiceMail to Email service delivers your voice messages to your existing Western Email account or new IMAP account as an audio file attachment.

There are two ways to have your messages delivered to your email:

Voicemail to Email
Messages are forwarded to your Western email as a wav file and you can access your voicemail anytime, anywhere where you have access to your Western email. This option ONLY allows message management from your email account. When a voice message is delivered to your email account in this manner, the message waiting light is not activated on your phone.

Voicemail to Email and Phone
Messages are delivered to a separate IMAP email account in your email client using your credentials. This delivery method is not compatible with either Convergence or BlackBerry. This option allows voice message management from either your email account or your phone, by turning the message waiting light on or off.

To SIGN UP please go to: http://www.uwo.ca/its/telecom/voicemail/
For more information, visit the Voicemail page at http://uwo.ca/its/telecom/voicemail/.
eLearning Technology Team News
<elearning-tech@uwo.ca>

OWL Upgrade
The OWL upgrade on May 1, 2014 included many feature requests, such as enhancements to group management, Tests & Quizzes and question pools, and Gradebook.

Changes included:
• users can see other members of their groups, if enabled by the group's creator
• users can unjoin from groups they have previously joined, if enabled
• question pools in Tests & Quizzes can be transferred between users
• MathJax support can be enabled on a per-tool basis
• listings of question pools in Tests & Quizzes display the parent pool for sub-pools
• the Gradebook displays the course grade to two decimal places

Details of these changes with images are provided at https://owl.uwo.ca/portal/site/gateway/page/c45d1918-5051-4f87-b5e8-10d3147afcaa

Teaching with Technology Institute
May 2014
The annual Institute hosted by the TSC and the ITRC was held on May 21st and 22nd. The focus of this institute is to highlight the essential knowledge and skills required for the integration of technology in either face-to-face or online courses. Guest speakers were Tom Adam, Project Manager and Special Advisor to the Provost on Copyright; Peter Ferfuson, Political Science; John Barnett, Faculty of Education; Kim Luton, Sociology; Ann Bigelow, B.M.O.S. program; Michele Barbeau, Anatomy and Cell Biology; Deb Stuart, Student Development Centre; and Michael Friesen, MIT.

Western Active Learning Spaces (WALS)
Work is almost complete on the new WALS classroom in UCC room 66. May and June summer classes are using the temporary space in the Teaching Support Centre room 121.

“The new WALS classroom features instructional technologies and uses space in innovative ways to facilitate collaboration and active learning.” (WALS classroom web site)

Visit the WALS web site to follow the progress of construction and to view plans for the new room at: http://www.uwo.ca/wals/classroom_space/photos/wals66.html

Instructors who will be teaching in the WALS room in September are receiving training. This training is supplemented by video tutorials which are being produced with the assistance of the ITRC. For enquiries about WALS and to learn more, email <wals@uwo.ca>.

eLearning Toolkit
The eLearning Technology team and the ITRC have created an eLearning Toolkit web site, which is a collection of eLearning concepts and technologies available at Western. The site at http://elearningtoolkit.uwo.ca is organized in three cross-referenced categories: Discover Concepts, Find eLearning Terms, and Achieve Specific Outcomes.

This toolkit will continue to evolve and to be regularly updated by the team to keep the information current. We anticipate the toolkit will be a valuable go to site for the campus.
I TRC Project: Virtual Exhibit
Aditi Bhargava <itrc@uwo.ca>

In January 2014, the ITRC was approached by Dr. Alena Robin, from Modern Languages and Literature, with a request to help create a virtual exhibit for her interdisciplinary course, Spanish 3500G: Community Service Learning in the Hispanic World: History, Culture, and People in Context. Alena is an art historian and teaches the course which explores Guatemalan history, people and culture, and includes a community service learning experience that required the class to travel to Guatemala for three weeks in May.

The virtual exhibit was a collaborative project assigned to the students to build an online gallery of Chilean photographer, Jorge Uzon’s photographs on the civil war in Guatemala. Each student chose four of Uzon’s photographs, and wrote a description that explored a specific topic relating to the photograph. Alena asked the ITRC to help with the technical side of building the virtual exhibit. ITRC student consultants Jenna Le, Tyler Benning, and Aditi Bhargava were part of the team that was responsible for developing and designing the virtual exhibit.

The virtual exhibit, Guatemala Beyond the Civil War: Through the Lens of Jorge Uzon is a web site that is hosted on Western’s server and can be found at http://uwo.ca/modlang/guatemala/. (See the home page image on page 10.) The exhibit displays an image carousel for visitors to view selected photographs with their accompanying commentary exploring the meaning behind each photograph. The exhibit is divided into five different themes and also includes pages that introduce the project, class, and the photographer.

The creation of this virtual exhibit was an involved process that included using HTML, CSS, and JavaScript to give the web site functionality. The ITRC designed and created the overall aesthetics for the virtual exhibit, from choosing a colour scheme to creating the logo. Some of the features of the exhibit include a toggle that allows the visitor to translate the exhibit from English to Spanish, and vice versa. The virtual exhibit has also been developed to be compatible with all mobile devices, and respond to touch screen gestures.

As the students and instructor were travelling to Guatemala for the community service learning portion of the course, the ITRC setup a blog so that they could document and share their experiences while they were away. The blog is hosted through Wordpress, which is an external blog hosting site, and the class easily maintained the blog while they were in Guatemala.

In addition to the virtual exhibit, Alena had two related video projects for the web site. She invited Jorge Uzon to Western as a guest lecturer to speak about his work and ITRC consultants Travis Pulchinski, Aaron Shyr, and Jay Ferencz assisted with these video projects. The first video project was to capture Jorge Uzon’s public lecture that was delivered in English in Conron Hall. The second video project was to record Alena’s class interviewing Uzon about his work and experience in Guatemala. This interview was delivered entirely in Spanish.

Overall, this project required a diverse range of skills that included web site development to video production. Alena and her class were very pleased with final version of the virtual exhibit, and they regularly used their blog to post about their adventures in Guatemala!

Aditi Bhargava is completing third year in MIT.
Tyler Benning graduated with a B.A. from MIT/MTP in June 2014.
Jenna Le graduated with a B.HSc. Health Science and Biology Honours Specialization June 2013 and received a Diploma in Computer Science June 2014.
Aaron Shyr graduated with a B.HSc. Honours Specialization in June 2014.
Jay Ferencz is completing the MIT/MTP program.
Travis Pulchinski is completing third year in Film Studies and French.

Information about the ITRC consultants is available online at http://itrc.uwo.ca/about_us/student_consultants.html
Editor’s Note

Merran Neville <mneville@uwo.ca>

Since October 1978, the newsletter has been one of my responsibilities. This has included previous newsletters Computing Centre Newsletter with the orange target logo, Focus and Flash Notes, and for the past twenty years In Touch.

With my retirement from Western this summer, Sue Barschel will become the new newsletter editor and ITS will continue to communicate with our campus community through In Touch.

I wish Sue every success as she takes on this new responsibility.
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

Commonly Used Numbers

<table>
<thead>
<tr>
<th>Service</th>
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<tr>
<td>ITS Customer Support Centre</td>
<td>519-661-3800</td>
<td>ext. 83800</td>
<td><a href="http://itshelp.uwo.ca/">http://itshelp.uwo.ca/</a></td>
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<td>Voice &amp; Data</td>
<td>519-661-3800</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>
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<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>
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<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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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.

Facilities

<table>
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<tr>
<td>ITS Training Lab</td>
<td>SSB 4230</td>
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<tr>
<td>ITRC</td>
<td>SSB 4320</td>
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</table>

General Student Computing Labs:

- NSC - Taylor Library
- NCB - 105
- SH - 1310
- HSB - 13, 14, 16
- SSC - 1000, 1012, 1032