

# In Touch

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## Password Management

*Nancy Wellard <nwellard@uwo.ca>*

ITS implemented a new Password Management process in December 2009. This is the first module of our Western Identity Manager system.

Our new Password Management procedure provides a common secure self service application for the Western community to change a password or reset a forgotten password for your Western Identity. The process is similar to that used by commercial applications, including banks using challenge response questions to confirm your identity.

Passwords are an important part of identity security. ITS encourages you to subscribe to our new Password Management service at your earliest convenience.

For further information on Password Management and instructions explaining how to subscribe to this service please refer to <http://www.uwo.ca/its/identity/>.

For related information regarding passwords, please refer to our security web page <http://security.uwo.ca/mainpass.html>

## ITS Acting Director

Debbie Jones, the Director of ITS is currently on leave. During her absence, Jeff Grieve is the Acting Director of ITS, assuming the interim leadership responsibilities of ITS. Jeff is the Associate Director (Technical Support) in ITS and has responsibility for Network & Computing Infrastructure, Operations & Server Support, and Cabling Infrastructure.



## Scheduled System Maintenance

Sundays  
6:00am - 12:00 noon

## Need help, have a question?

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

## About *In Touch*:

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We welcome your comments,  
suggestions, and articles.

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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.

## Network Backup Service

For network backup and  
recovery service please contact  
the ITS Legato Group, e-mail:  
[legato@uwo.ca](mailto:legato@uwo.ca) For details see:  
[http://www.uwo.ca/its/network/  
backup.html](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 [http://  
www.uwo.ca/its/about-its/hours.html](http://www.uwo.ca/its/about-its/hours.html)

## *In Touch* Mailing List

Additions, deletions, and  
changes to the mailing list can be  
made using the form on the web  
at [http://www.uwo.ca/its/doc/  
newsletters/InTouch/  
subscription.html](http://www.uwo.ca/its/doc/newsletters/InTouch/subscription.html)

## ITS Services Document

<http://www.uwo.ca/its/services.pdf>

## Managing Password Overload with Free Tools

James McCloskey <jamesm@uwo.ca>



Passwords have always been a major part of the information security toolkit, but no matter how you feel about them, almost everyone (from end users to IT security professionals) agrees that effective use of passwords is a tough topic.

From the end user's perspective, managing a plethora of unique, complex passwords for different systems is a serious challenge; usually this results in one of two undesirable outcomes. The first is "common passwords" – reusing the same password for many systems; the second is writing down passwords to avoid forgetting them. The "common passwords" approach can lead to broader problems for a user (or the University) if one system is compromised: clever and motivated hackers may be able to reuse a password that has been discovered in one attack to attack other systems. (**Note:** this particular challenge was discussed in some detail in the article **Securing the "Digital You" to Protect the "Real You"**, published in the Winter 2007 edition of *In Touch* Vol. 14.2)

From a system administrator's perspective, requiring users to have unique and complex passwords is fundamental security control, especially where a privileged administrative account (e.g., a Local/Domain Admin accounts in Windows, *root* accounts in the UNIX/Linux world) may be required for use by more than one individual. Unfortunately, this

control can exacerbate the password management problems faced by users, which in turn may result in more passwords being written down (and thus, less security overall).

Fortunately, there are free tools to help with these seemingly intractable related problems, and simple approaches to using those tools as effectively as possible.

### Open Source to the Rescue

One freely available solution that is in widespread use within ITS is *Password Safe* (for Windows), and a compatible multi-OS counterpart, *Password Gorilla*. As open source projects used and promoted widely by the information security community, both programs are well-tested and considered very secure. As with any software, however, it is important to look for software updates periodically, so that any new security-related updates can be applied.

Essentially, *Password Safe* and *Password Gorilla* provide you with an encrypted, password-protected database of your various IDs and passwords, which can be stored and carried with you on a USB key (note also that the *Password Safe* program itself can be run from the same USB key). This means that instead of having to remember lots of different passwords, you can remember a single, complex password: all you need is your USB key, and the password you need to open your "safe".

The tools also make it easy to work with the different IDs and passwords you store in the "safe": IDs and passwords can be grouped logically (e.g., Work, Personal, Banking, etc.), unique passwords can be automatically generated within the

tools, and double-clicking an entry in the "safe" lets you then paste the associated password into the appropriate login/password dialogue. Advanced features provide further functionality to experienced users.

Of course, since all your passwords are in one place now, there are two important precautions to take:

- 1 Make sure you have a strong password on the "safe" – the passwords being stored aren't very well protected if the "safe" password is weak.
- 2 Make sure you have a backup copy of the "safe" – though it is infrequent, USB keys can and do go bad, and this way you won't have to recover or change all your passwords if this ever happens to you.

### Sharing Privileged Passwords

Another benefit of using such tools is the ability to access and maintain multiple "safes". For example, if you share system administration duties as part of a group of individuals, your group may want to create a shared "safe" that can be stored in a secure central location (for example, on a tightly access-controlled file server).

Once again, the strength of the password on this "shared safe" is paramount – even more so when one considers the privilege levels of many of the accounts stored in such a "shared safe". Conveniently, the "personal safes" of each of the group members provide a ready solution to this problem: each member of the group can place an entry for the complex "shared safe" password into his or her own "personal safe". To use the

(continued on page 4)

## Windows 2008 Server Upgrade for uwo.ca Domain

Nancy Wellard <nwellard@uwo.ca>

ITS will begin the upgrade of our Windows environment for the uwo.ca Active Directory during May 2010. This upgrade will be a staged approach and will be performed during our ITS maintenance window on Sunday mornings between 6:00am - noon.

### Phase 1

- Schema changes are targeted for Sunday, May 2.

### Phase 2

- Upgrade of the first domain controller is targeted for Sunday, May 9.
- Upgrade of the remaining two domain controller servers will be scheduled for subsequent Sundays.

### Phase 3

- Uplift Windows domain functional level to Windows 2008

Once all domain controllers in the forest are running Windows Server 2008 (including child domains), we can set the forest level to 2008. This allows us all to make use of the domain wide and forest wide available features.

We are hoping to be in a position to make this change in December of this year.

Over the coming months we will also evaluate when the optimum time will be to move to Windows 2008 R2.

## Service Disruptions and the AODA

An email communication was sent recently to the Western Community regarding the method of advertising service disruptions.

“Some new practices for communicating service disruptions at Western ... will be of benefit to all members of the Western community. These practices came through an initiative to meet new accessibility standards under the Accessibility for Ontarians with Disabilities Act (AODA).”

“Western now has a central website where broad public disruptions in physical facilities (such as elevators and buildings), Information Technology web and data services, and Campus Recreation are posted in calendar format. In addition, Physical Plant staff or contractors are now posting standard service interruption signs on facilities they maintain or service. To view current and planned service disruptions go to <http://accessibility.uwo.ca/disruptions.htm>”

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*(continued from page 3)*

“shared safe”, each member only needs to remember his or her “personal safe” password.

A few final tips for setting up and managing such “shared safes” include:

- 1 Provided he or she knows the password for the “shared safe”, each member of the group must be able to read a master copy of the “shared safe”, and some or all members must be able to update the “shared safe” contents (when passwords change, or when entries are added or deleted).
- 2 When an update is needed within the “shared safe”, the master copy is edited, and all members of the group can be advised to simply copy the updated file (which retains the same “shared safe password”).
- 3 The “shared safe password” should be changed and re-distributed securely to group members on a regular basis (annually, at least), and whenever a group member departs (in such cases, individual “shared safe” password entries may also need to be updated).

### Useful Links

- **Password Safe main page:**  
<http://passwordsafe.sourceforge.net/>
- **Password Gorilla main page:**  
<http://www.fpx.de/fp/Software/Gorilla/>

For more in-depth information, visit the <http://security.uwo.ca> or <http://wellness.uwo.ca> sites. As always, if you have an Information Security issue, concern, question, or comment, or if you want more information on the topics discussed in this article, please do not hesitate to contact me. And keep computing safely!

## VoIP Deployment - Update

Mona Brennan-Coles <mona@uwo.ca>



VoIP deployment is a multiyear project (2008-2011) with two components:

1. The **Power Strategy Closet Upgrades** which includes providing UPS and generator power, upgrading closet electrical and heating, ventilation and air conditioning (HVAC) as needed and replacing existing network switches with ones able to provide power to the IP telephones. Physical plant is managing the power, electrical and HVAC upgrades. ITS is managing the UPS and network switch deployments.

### New Contact Centre Services

ITS provides contact centre services to the Registrar's Office and the ITS Help Desk using Nortel's Symposium to direct callers to the best person to answer their question. International and long distance callers to the Registrar's office are given priority in the queues to minimize their expense.

Information about the selection and replacement of Symposium was provided in *In Touch*, Winter 2009, Vol. 16 No. 2, page 5. Once the new Contact Centre solution is finalised, ITS will then implement the new service in phases beginning with training, design and installation as an ITS pilot.

Year Two (2009-2010)	Year Three (2010-2011)
<p><b>Completed:</b>                      Western Sciences Centre                      Elborn College                      Thompson Engineering                      University Community Centre                      Social Sciences Building                      Faculty of Education (except for Portable)                      Cronyn Observatory                      Law Building                      Spencer Engineering                      Weldon Library</p> <p><b>In Progress / Planning:</b>                      Boundary Layer Wind Tunnel                      Boiler House</p>	<p>3M Center                      McIntosh Gallery                      Middlesex College                      North Campus Building                      Somerville House                      Staging Building                      Thames Hall                      University College                      Visual Arts Center                      Westminster Property                      Physics &amp; Astronomy (as part of Renovation)                      Stevenson-Lawson (as part of Renovation)</p>

### Additional Voicemail Notification

A new audible alert to indicate a voicemail message has been added to all VoIP (Voice over Internet Protocol) phones at Western. In addition to the familiar red message waiting light, the VoIP telephone system now provides an audible alert (stutter or interrupted dial tone) when you have new voicemail messages.

As part of the ITS commitment to ensure equitable access to our services and facilities, "stutter dial tone" was enabled on the VoIP telephone system on April 1, 2010. The red message waiting light will continue to function.

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2. When a building is ready for VoIP, ITS installs grey IP telephones and removes the black digital phones.

<b>Completed</b>	
Advanced Facility for Avian Research Biotron Research Building Chemistry Building Claudette MacKay-Lassonde Pavilion Clinical Skills Learning Building Dental Sciences Elborn College Health Sciences Addition ICFAR Kresge Building Material Sciences Addition Graphics Building	Medical Sciences Addition Medical Sciences Building Molecular Biology Building Molecular Biology Laboratory Robarts Research Institute Siebens Drake Research Institute Support Services Building Taylor Library TRAC West Valley Building Western Student Support Building Biological & Geological Sciences* Western Sciences Centre

<b>Scheduled for completion within the next 3 months (June)</b>	
Thompson Engineering Spencer Engineering Faculty of Education	Cronyn Observatory Law Building Weldon Library

**Would you prefer to receive an email with a link to the online version of *In Touch*?**

**Email:** [in.touch@uwo.ca](mailto:in.touch@uwo.ca) to request to be added to the mailing list.

**NOTE:**  
**The new mailing list is also used for the ITS Course Brochure.**

## **ITS Survey Tool - Erratum**

In the previous issue of *In Touch*, Winter 2009, Vol. 16 No.2, on page 5, the article about the **ITS Survey Tool**, second paragraph, listed the login link to the Survey Tool incorrectly. The paragraph with correct link should read:

**It is now possible to login to the Survey Tool at**  
**<https://rabbit.vm.its.uwo.ca/Surveys/default.aspx?type=adminLogin>**  
**with your Western username and password and begin to create your own survey.**

## **Antivirus RFP**

**Nancy Wellard <[nwellard@uwo.ca](mailto:nwellard@uwo.ca)>**

Our current agreements for antivirus software expire at the end of August 2010. To plan for a replacement, we recently formed a collaborative project team to review and analyze proposed solutions from several vendors who responded to a Request for Proposal issued by Western in December 2009.

The focus of the RFP is to ensure that we are providing the appropriate software for virus protection on the many computer assets owned by the University. The RFP has been awarded to Trend's Enterprise Security Suite. Any required deployment will be completed by August of this year.

Details will be posted on the ITS website as they become available. For further information concerning this project, please contact Nancy Wellard by email at [nwellard@uwo.ca](mailto:nwellard@uwo.ca).

## ITRC Project: Gestational Diabetes Mellitus (GDM)

Adam Tuck and Paul Sham <itrc@uwo.ca>

Medical students must learn the complex and intricate interactions of the human body. To help them learn more effectively, the ITRC has worked with Dr. Marjorie Johnson, a professor in the Department of Anatomy and Cell Biology, to build instructional tools that provide more information and interaction than textbooks. One instructional tool that we have recently developed is a learning object about gestational diabetes (GDM), which is of rising concern for mothers and doctors alike. (Gestational diabetes is a condition in which women without previously diagnosed diabetes exhibit high blood glucose levels during pregnancy.) We worked on this module collaboratively with Alicia Clancy, a graduate student under Dr. Johnson's supervision, starting in October 2009 and finishing in March 2010.

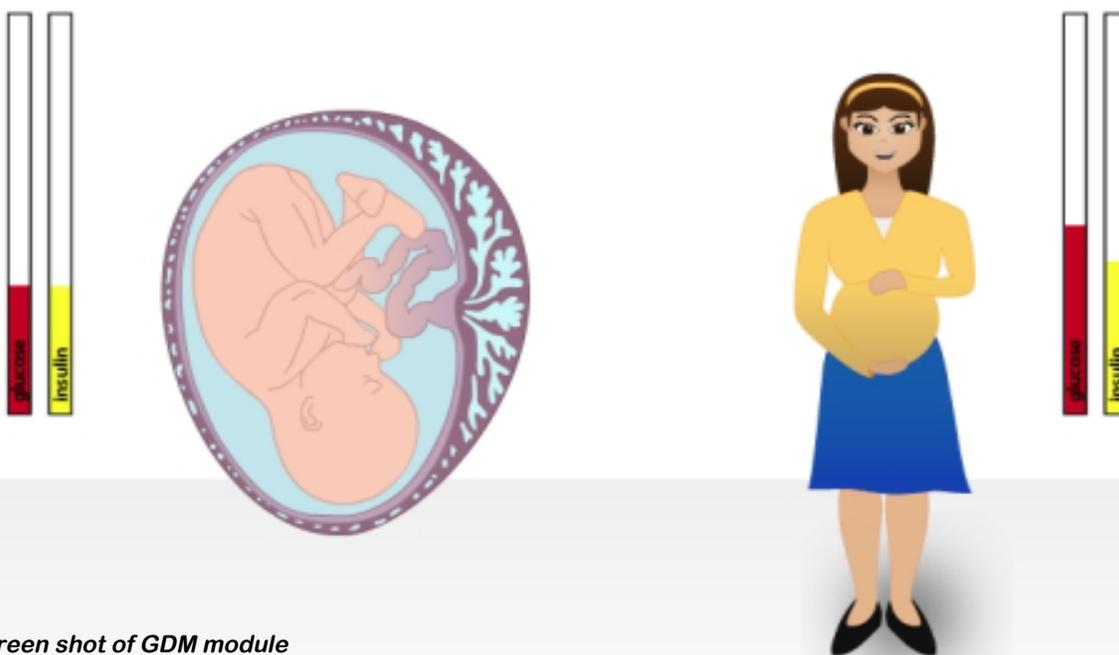
While neither of us had much prior knowledge about gestational diabetes, we soon learned all about this condition and the complications that GDM can cause. During pregnancy, gestational diabetes, like other forms of diabetes, is a condition of high blood glucose levels. One of the effects of GDM is the growth of babies to gigantic proportions, which poses a health risk for both mother and child. For example, an Indonesian mother gave birth to a 8.7kg (19.2lb) baby, which is three times the weight of an average newborn, due to the effects of gestational diabetes.

Source: <http://edition.cnn.com/2009/WORLD/asiapcf/09/25/indonesia.baby/index.html>

The learning object shows the differences between non-pregnant women, pregnant women, and pregnant

women with GDM. By combining segments of animations and interactive instances, students can see how GDM affects the normal functions of women. Students are guided through animations showing the relevant anatomy of each example, with interactive instances occurring to further explain each event in the module. By showing the internal changes caused by GDM on a cellular and chemical level, students can better learn its causes and effects.

One of the challenges that we overcame in the design process of the GDM learning object was integrating our animations with the interactive functionality of a separate application, called Articulate Engage. We managed to find a solution that integrated both tools into one seamless application. The application that we designed walked users through three separate sections. Interspersed with these



Screen shot of GDM module showing developing fetus and mother.

modules were Engage segments, which took a freeze frame of the animation and provided text and image-based markup explaining the specifics of what was happening. Combining the two tools was beneficial because we could concentrate on the animation, while Alicia could create and modify the Engage segments independently.

The ITRC “partnership” with the Department of Anatomy has allowed for unique projects that use our multimedia skills to create tools for learning. Articulate Engage is a tool already used by Jay Loftus (Schulich TTS group), who also collaborates with Dr. Johnson to design learning modules for Anatomy. By integrating Articulate Engage, changes to the module can be made directly and no further technical knowledge is required to modify the textual content in the animation. This project is a great example of how technology can enhance the learning experience of students, which the ITRC strives for.

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*Paul Sham joined the ITRC in the Fall 2007 and Adam Tuck joined in May 2008. Both students will be graduating from the MIT/MTP program, offered by the Faculty of Information and Media Studies, this June 2010.*

*Information about the ITRC student consultants is available at <http://itrc.uwo.ca/studentConsultants.html>*

## Instructional Support Team News

Merran Neville <mneville@uwo.ca>

### Managing Grades

Final grades for this year can be submitted from WebCT OWL to the Office of the Registrar. The Export Final Grades tool can be used by department administrators or by instructors. Grade submission processes vary so please confirm with your department how they would like grades submitted.

### Accessing the Tool

To access the Export Final Grades tool:

- 1 Login to WebCT OWL (The University of Western Ontario institution)
- 2 Click on **Instructor Tools** (located in the *External Courses* channel)
- 3 Select **Export Final Grades**
- 4 Follow the on-screen instructions.

Many half-term courses successfully submitted grades using this tool in December. The ITRC website provides detailed information about managing grades with OWL: <http://itrc.uwo.ca/grades/> This section centralizes existing documentation and includes a new document specifically for instructors and staff who have never used OWL.

### Intersession and Summer Session Courses

Intersession and Summer session courses were created in OWL in March. Instructors have had access to update material for these sections since then.

### Teaching Support Centre (TSC) Programs

The Instructional Support team and the ITRC will be participating in two TSC programs in May.

**Spring Perspectives on Teaching Conference** will be held on Wednesday, May 19, 2010. The keynote speaker is Jeanette McDonald, Wilfrid Laurier University and the title of her talk is **The Entitlement Generation - Implications for the Classroom**.

Details about Spring Perspectives are available at [http://www.uwo.ca/tsc/perspectives\\_spring\\_2010.html](http://www.uwo.ca/tsc/perspectives_spring_2010.html).

The annual **Summer Teaching with Technology Institute** will be held May 25 -27, 2010. This Institute is co-hosted by the TSC and the ITRC and will be held in the Support Services Building. For details see the CALENDAR under **Upcoming Events for Faculty** at [http://www.uwo.ca/tsc/Select\\_May\\_2010](http://www.uwo.ca/tsc/Select_May_2010) and follow the links on the dates for the Institute.

### ITRCProject Proposals

The summer is an excellent time for the ITRC to work on projects submitted by faculty. If you have a project proposal, please contact the ITRC either by email to [itrc@uwo.ca](mailto:itrc@uwo.ca) or phone 519-661-5513, ext.85513. We welcome the opportunity to meet with you to discuss your project.

Each issue of *In Touch* includes an article about an ITRC project, written by the students working on the project. For example, the project described on page 7 about **Gestational Diabetes Mellitus (GDM)** involved two ITRC students working with a faculty member and a graduate student from Anatomy to develop the learning

module described in the article. If you are looking for ideas, these articles provide an excellent guide about what can be done.

Details about the ITRC are on the web site at <http://itrc.uwo.ca/>.

The ITRC accepts project proposals year-round for the development of computer-based instructional material and there is no charge for these academic instructional projects.

## Commonly Used Numbers

ITS Customer Support Centre	SSB4100	519 661-3800 ext.83800	<i>helpdesk@uwo.ca</i>
Voice & Data	SSB4100	519 661-3800 ext.83800	<i>helpdesk@uwo.ca</i>
Administration Office	SSB4300	519 661-2151 ext.82151	FAX No.519 661-3486 ext.83486
Computer Accounts Office	SSB4100	519 661-3800 ext.83800	<i>accting@uwo.ca</i>
Computer & Network Operators		519 661-3525 ext.83525	<i>operator@uwo.ca</i>
ITRC	SSB4320	519 661-2111 ext.85513	<i>itrc@uwo.ca</i>
ITS Non-Credit Courses	SSB4300	519 661-2151 ext.82151	<i>its-courses@uwo.ca</i>
Dial-in Line (all modem speeds)		519 640-5305	
E-mail Postmaster		519 661-3800 ext.83800	<i>postmaster@uwo.ca</i>

## Facilities

ITS Support Centre	SSB4100	General Purpose Labs	UC2, NSC110, SH1310, NCB105,
PC Lab	SSB4230		HSB13, HSB14, HSB16,
ITRC	SSB4320		SSC1000, SSC1012, SSC1032



## Mailing List

If you wish to have your name and/or address added, changed, or deleted from the *In Touch* mailing list, please provide the following information.

**Category:**

UWO \_\_\_ faculty, \_\_\_ staff, or \_\_\_ graduate student (Please give campus address below.)

**Request following action:**

\_\_\_ ADD      \_\_\_ CHANGE      \_\_\_ DELETE

Last Name \_\_\_\_\_ First Name and Initials \_\_\_\_\_

Department \_\_\_\_\_

Address of department (Building on campus or affiliate) \_\_\_\_\_

Previous label information (if varies from above, or include previous label)

Return to: *In Touch* Mailing List, Information Technology Services, Support Services Building 4300, The University of Western Ontario, London, Ontario, Canada, N6A 3K7

