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Moving forward: ICT developments



John Parry
Director

Welcome to the first issue of Insight, the Information Technology Resources (ITR) newsletter, for 2011. The year is now well underway and there is significant change in progress across UTAS that will shape the next decade of our operations. Whilst this change has many facets, organisational, technological, and environmental (such as government and student demographic changes), technology underpins or influences much of the change. The Information and Communications Technology (ICT) industry has become synonymous with change over its relatively short lifespan, and many industry analysts describe the technologies that cause considerable, rapid change as 'disruptive technologies'. UTAS is confronted with adopting many new technologies of a disruptive nature over the next couple of years as a result of generational change of its business systems and changes in its teaching and learning and research-based services.

These changes will have a profound effect on the operations of UTAS, particularly in an environment where consumer-based demand and understanding of technology has changed considerably in recent years. The primary effect and outcomes of this change will be new and/or improved ICT-based services, increased business efficiency, and more flexibility in the way services are delivered, i.e. delivery platforms will need to be agnostic (many different types of devices) and be accessible in a highly mobile environment.

So, in which areas are we likely to experience significant change? In the administrative domain, staff and students are most likely already aware of the changes around academic timetabling and the future changes around student management through the SLIMS project. Combined with the change to a new finance system in 2010 and an agenda of further expansion of the services around human resource management, UTAS is strengthening its ability to hold considerable data for decision support and planning.

Alternatively in the teaching and learning domain, considerable effort is currently being devoted to the selection of a replacement learning management system (known within UTAS as MyLO - My Learning Online) and also the selection of a replacement library management system. Additionally developments continue around video streaming and videoconferencing services as well as the development of other services that would form part of a virtual learning environment (VLE) for UTAS.

Research and infrastructure are other domains where again considerable focus and effort has, and is, being applied with the development of an eResearch service portal for service registration, and the provision of high-capacity network bandwidth to facilitate a range of network bandwidth-intensive research functions. Another area of infrastructure undergoing continued change includes UTAS's wireless network through an expanded number of connection points and increased wireless coverage.

Overall the level of change either through technology or underpinned by technology is perhaps unprecedented within UTAS's history. The change however is absolutely necessary to continue and enhance UTAS's reputation and position as a leading research and teaching and learning institution – locally, nationally and internationally.

This edition of Insight describes a number of the changes I have mentioned and will hopefully provide further information and explanation of the change and its effect on the operations of UTAS. I trust you have a successful 2011 and look forward to further communication with you on many of the service changes over the course of the year.

Lectopia upgrade notification

In 2011 Lectopia, the product that currently provides lecture recording and delivery services at UTAS, will be upgraded to the new product EchoSystem.

The move to EchoSystem (planned for implementation in Semester 2, 2011) will result in changes to both the staff and student environment. The project team managing the upgrade will be focusing on communication and training for both staff and students over the next six months to help users with the transition. This will include a small pilot after Easter for staff and their student cohorts and volunteers are welcome.

To find out more about the project go to the website www.it.utas.edu.au/lecture-recording/ or email Leah.Chandler@utas.edu.au.

Project updates

Library Management System: A new system on the Horizon

The project to find a replacement for our Horizon library system is in full swing. Tenders have been evaluated and the decision-making process is now underway. Soon the evaluation will near its end and UTAS will begin to implement a new system to manage library resources, subject to final funding approval.

The Library Management Project was first initiated in 2008 when the UTAS library decided to look at issues with the current Library Management System and investigate what could be done to rectify them. The most critical of these issues was the discontinued vendor support for the Horizon system, which has been in place at UTAS since 1996. An extensive Library Systems Environmental Scan revealed a number of options and made recommendations on how to move forward in the long and short term.

The project plan that followed identified two necessary phases. Firstly, the installation of a resource discovery layer (Summon Web-Scale Discovery) over the current library system (Horizon) to give clients a single search interface to the Library's catalogue, electronic articles and books and UTAS digital repositories. Secondly the replacement of the current and no longer supported Horizon system through a tender process.

As of April 2011 the first phase of the project is nearing completion. Once complete, staff and students will be able to search all library resources using a single search box. Phase two is also reaching a critical point. Vendor engagement sessions have been held and final assessments are being made. An announcement of the chosen system will be made in coming weeks and it is expected that this system will be ready for Semester 1, 2012.

Improving online learning at UTAS



Early last year ITR commenced a major project to manage the replacement of the Learning Management System (LMS) that underpins MyLO, the UTAS online learning environment. This project has now reached a critical point and over the next few months will accelerate to ensure a smooth implementation phase commencing during Semester 2, 2011.

UTAS implemented its first online LMS using the product WebCT in 2001. Since then the use of the LMS at UTAS has increased from 118 online units in 2001 to more than 2000 units in 2010. In 2006, the WebCT vendor merged with Blackboard, a large global LMS vendor, but now the support for this product is ending, thus forcing UTAS to move to another Blackboard product or change products completely.

Assessment of the latest version of Blackboard Learn, version 9.1, identified that along with new and improved functionality, the interface has undergone major changes. These changes would mean that considerable staff and student training as well as self-help resource development would be required if the product was chosen for UTAS. With this in mind, the senior management team agreed that an environmental scan of available LMSs on the market should be undertaken to select a product to best meet current and future learning and teaching needs at UTAS.

The result of the environmental scan, coupled with an extensive consultation program that included discussions with staff from six Australian universities, consideration of a review conducted by the Australasian Council on Open, Distance and eLearning (ACODE) and participation in a range of information-gathering events identified three viable alternatives: Blackboard Learn 9.1, Moodle 2.0 and Desire2Learn Learning Suite 9.0.

In order to determine which of these products best suits UTAS, a stringent evaluation phase involving user testing, ratings, comparisons and consultation has been developed. More than 65% of the weighting for this evaluation phase is the suitability of the new LMS to meet the current and future requirements of the UTAS teaching and learning community. Particular attention is being paid to ease of use, addressing current areas of frustration and integration with other UTAS systems.

In addition, during March public demonstrations from each of the selected vendors were held to give staff and students an opportunity to see the proposed solutions. UTAS staff and students also had the opportunity to participate in an evaluation of the systems between 14-24 March with sessions held in Hobart, Launceston and Burnie.

A recommendation for approval resulting from the evaluation phase is anticipated to be made in April 2011 and implementation and conversion to follow, commencing in Semester 2. Implementation will be staged and significant consultation with individual faculties and schools will occur. Final completion of the project is due in December 2013.

To manage the implementation phase a project team is being formed with staff from ITR and the Centre for the Advancement of Learning and Teaching (CALT). In keeping with the impact of the project, the majority of the proposed budget is to provide support for academic and teaching and learning staff. UTAS senior management sees the MyLO 2012 Project as an important opportunity to look strategically at the future direction of eLearning at UTAS, the eLearning Strategy, Your Voice outcomes and other UTAS strategies. ITR is working closely with CALT, faculties and schools to ensure a successful outcome.

System & infrastructure upgrades

Whilst many were enjoying the Christmas and New Year break, staff from ITR and other areas of UTAS were busily undertaking major upgrades to infrastructure and business systems. In total four major upgrades were completed including the PABX phone environment and Human Resource Management System (HRMS), as well as upgrades to our core network infrastructure and the CommVault backup and archival systems.

Each upgrade was managed by following the PMM@UTAS project methodology. The methodology supported project teams throughout each stage of the upgrade process and ensured consultation with key stakeholders occurred where necessary. Each upgrade carried a level of risk, which PMM@UTAS also helped to manage. Such risks are marginal compared to the risk that would exist if the upgrades did not occur. Only by undertaking upgrades can ITR ensure that the UTAS ICT environment is running smoothly. Specifically upgrades are undertaken to:

- maintain product currency
- leverage new product functionality
- realise opportunities for infrastructure consolidation and technology convergence.

For each upgrade ITR aims to ensure that there is minimal impact on the UTAS community. It is specifically for this reason that the four recent upgrades occurred over the Christmas and New Year break. For example, in order to complete the PABX upgrade, phones were unavailable for a period of time. OHS requirements mean that staff are not allowed on campus when phones are unavailable and for this reason it made sense to undertake the upgrade at the time of year when the majority of staff are off campus.

ITR understands that despite best efforts some staff are always affected by periods of upgrades. As such we would like to thank UTAS staff for being respectful and understanding during any upgrade period. We would also like to thank those staff that were involved with each upgrade. These staff worked through the Christmas and New Year period to ensure business as usual for UTAS at the start of 2011.

HUMAN RESOURCE MANAGEMENT SYSTEM

The HRMS upgrade involved moving to the latest release software, Version 12.

Key elements:

- Maintenance of product currency.
- Comprehensive testing of activities (payroll production, recruitment, and leave management).

Benefits:

- New product functionality.
- New WebKiosk interface and functionality.
- New opportunities for improved integration, authentication, and security.

PABX PHONE OPERATING SYSTEM

The PABX upgrade involved the move to MX-One, the latest PABX operating system.

Key elements:

- The complete replacement of PABX internals moving from a legacy PABX protocol environment to a VoIP environment.
- Planning for this upgrade had been ongoing over 2010, including the pilot migration of the Cradle Coast Campus mid-year.
- Some 3,500 telephone extensions were included within the upgrade.
- AASTRA was the partnering vendor company.
- The infrastructure upgrade was one of the largest ever undertaken at UTAS in terms of scale and coverage.

Benefits:

- The full integration of the AMC and UTAS/Newnham PABX environments.
- Ability to integrate with non PABX systems, such as OCS.
- Future cost savings through converged voice/data network infrastructure.
- Less downtime during future upgrades.
- The ability to combine PABX nodes into a single local voice communication environment.

CORE NETWORK INFRASTRUCTURE

The core network infrastructure upgrade involved the migration to the latest release of the operating system within the core network.

Key elements:

- Minimisation of downtime of the UTAS data network.
- Reconfiguration of network logic.
- Installation of core modules to improve service delivery.

Benefits:

- Improved network security and redundancy.
- Enhanced service delivery for services e.g. UConnect.
- Improved network management capabilities e.g. the strengthening of Virtual LAN functionality (positioning for MPLS).
- Positioning for the introduction of IPv6.

BACKUP AND ARCHIVE SYSTEMS

UTAS's primary backup and archive software upgrade involved moving to current version software.

Key elements:

- Maintenance of product currency.
- Reconfiguration of hardware clusters.

Benefits:

- Improved backup and archival management.
- 'Clientless' recovery (no need for local software on PC).
- Improved network bandwidth utilisation (faster backups).
- De-duplication improvements (improved use of disk storage).
- Increased range of 'backup agents' (greater range of supported software products with integrated backup/archival capabilities).

Service improvements

Videoconferencing improvements benefiting staff & students

Over the past year ITR has made several changes to videoconferencing facilities and infrastructure. These changes have markedly improved the quality of videoconferencing at UTAS and are delivering positive teaching and learning outcomes.

In 2009 the purchase of a new videoconferencing bridge and the installation of new Wide Area Network (WAN) links between Sandy Bay, Newnham and Cradle Coast laid the foundations for new and improved videoconferencing services. With this infrastructure in place, quicker and more reliable videoconferencing services are available to staff and students. The new bridge has also increased the capacity to connect three or more sites into the one videoconference.

The reliability of the service has also been improved through the introduction of management and monitoring software. The purchase and installation of the Tandberg Management Suite and Nagios Monitoring means that issues and errors with units and control panels are now being identified through an automated process that send out alerts instead of being discovered when a client is booked to begin a videoconference. With this system in place, issues can be resolved before they impact upon the client.

The decision to maintain the old service as a viable backup link is also critical to the usability of the service, as it can be engaged quickly with little disruption to users. This link has often been used to support connections, especially those linked to the Cradle Coast Campus.

In response to issues identified in the 'Your Voice Survey' technical support for users of videoconferencing facilities has also increased. For the first two weeks of each semester support staff from ITR have been attending all videoconference bookings in central managed facilities. This support has assisted many Lecturers and other staff to become familiar with the control panels so that they can confidently use the service to deliver teaching and learning.

To take advantage of the videoconferencing facilities at UTAS please visit www.utas.edu.au/itr/videoconf/timetable/book.html to make a booking or for enquiries please call x1818 (6226 1818) or email Video.Conference@utas.edu.au



Computer usage monitoring

The introduction of computer monitoring within lab environments is helping staff understand computer usage behaviour at UTAS. The ultimate goal is to improve student access to computers by rationalising their allocation across campuses.

A 'bespoke' system has been developed by ITR to collect this information. A script has been deployed to all computers in UTAS lab environments and is recording utilisation to a backend SQL database for analysis and reporting.

The system allows ITR to identify which computer labs are attracting the highest usage and those that can be considered under utilised. This data can also be broken down in to times, days of the week, semesters and months of the year.

ITR Assistant Director and Manager, Computing and Distributed Systems, Adrian Dillon, explains that this information has been requested by the Infrastructure Planning Management Committee (IPMC) to ensure UTAS is receiving value for its investment in lab computers and ensuring students have access to sufficient lab

computers on each campus. "Without this information the only evidence of student computer usage behaviour is anecdotal" said Adrian.

With this monitoring system in place, ITR can use the data to evaluate redeployment requests and to assess whether redeployment is an option for increasing the numbers of computers in high usage lab environments. This data provides IPMC with the information required to make decisions about appropriate resource allocation.

A utilisation/monitoring system also provides the potential for additional services functionality to be added in the future. According to Adrian, ITR is currently evaluating a low-cost commercial replacement solution, that in addition to providing the current level of functionality, would also allow utilisation maps to be created for individual labs. This information would be displayed on a website and via digital signage to inform students of the availability of computers in specific labs.

Maintenance made easy: Web Content Management

In mid-2009 the Web & Learning Services team began implementation of the University Web Content Management System (UWCMS). In 2011, the team is proud to announce that this system is now firmly embedded at UTAS and clients are reaping the benefits that it has to offer.

The UWCMS makes website maintenance a much simpler task. Using the system, staff do not need extensive web editing skills or expensive web editing software to update their web pages. Instead all website editing is done via a web browser and a simple edit interface (the Control Panel) that makes it even easier to undertake website maintenance.

A large part of the implementation process is the delivery of a comprehensive training program. This program shows people how to use the new system and also educates people about how to develop quality web pages based on information from the Web Policy and Web Publishing Guidelines. By making the training mandatory, Web & Learning Services are also able to ensure that all UTAS web pages reflect the quality look and feel desired. To date, the training program has been delivered to over 250 staff, some of whom have chosen to learn more by completing further advanced training. For those who are yet to complete the training, Web & Learning Services is pleased to be able to offer a combination of online and face-to-face training. Staff can now complete the 'Writing for the Web' component in their own time through MyLO and, once completed, can register for the two-hour practical workshop. This change to the training program is a result of regular evaluation and revision to ensure that training is meeting staff needs.

Another major event for the UWCMS was the launch of the new UTAS home page. This was a very proud moment for Web & Learning Services and has proven to be the single most important

factor responsible for improvements in UTAS' website rankings. Web & Learning Services are also proud to announce the recent launch of websites in a new design that complements the homepage. This design will be applied to all websites currently managed in the UWCMS over coming months.

Recently, another major milestone has been reached with the School of Medicine being the first UTAS School to move into the UWCMS. This move involved the development of new functionality to allow the presentation of information about people, research areas and projects on school and faculty websites whilst replacing the Faculty Content Management System (FCMS). Over the coming year Web & Learning Services will continue to work with faculties and schools to plan the migration of their websites to the UWCMS, after which the FCMS can be decommissioned.

The move into the UWCMS has also been embraced by one of the three UTAS institutes, IMAS. The success of this move was quick to see with the new site having a 300% increase in hits in the first week! In addition to IMAS, other recently developed large websites include the Library, Channel UTAS and Communications & Media. Web & Learning Services has also been working with a number of groups to develop Category 3 websites (those not under the UTAS domain but hosted at UTAS). These include TIAR (www.tiar.tas.edu.au) and the Pathways website (www.pathways.tas.edu.au), which both provide good examples of the range of features the new system and the supporting Web & Learning Services Team can offer.

For more information about websites developed by Web & Learning Services in the UWCMS please see our website: www.web-services.utas.edu.au/webservices-review/sites-developed-by-web-services. For feedback and suggestions please contact Melanie Pittard on 6226 6297 or Melanie.Pittard@utas.edu.au

New support offered for Centrally Managed Learning Spaces

To assist staff with the introduction of Centrally Managed Learning Spaces (CMLS) new support arrangements have been implemented. Since Semester 1, 2011 staff or students experiencing difficulties in the use of any CMLS amenities have been able to call a specific help line, ext. 6161 (6226 6161), to receive prioritised support. CMLS support requests may relate to Audio Visual (AV), Videoconferencing, IT, lecture recording, lighting, heating or other room infrastructure settings or usage.

Previously, separate support numbers were provided for different issues. Under this model efficient support could only be received if clients successfully self-diagnosed their problems and correctly determined which support number to call. Issues were being resolved but the process could be time consuming and was frustrating for both the client and the support staff. A single point of contact via ext. 6161 has now eliminated this problem.

Provision of a single support number has been made possible through an expansion of the ITR Service Desk. This expansion has included an increase in Service Desk staff numbers as well as the delivery of specialised training. Staff answering incoming calls on ext. 6161 have been trained explicitly for CMLS issue diagnosis and remote resolution. If required, staff can also activate prompt onsite support. Onsite support is offered by 'CMLS support technicians' who are able to diagnose and troubleshoot all types of common issues.

The ext. 6161 (6226 6161) number will be available during the Service Desk hours of 8:30am – 5pm on UTAS working days. Timetabled videoconferences outside these working hours will also be able to use ext. 6161 to reach support. Arrangements for support for non-standard hours can also be arranged upon request.

New & emerging

Hosted Data Services: An all-hands-on-deck data solution

In October last year ITR launched Hosted Data Services (HDS). Since that date many areas of UTAS have embraced the service, enjoying the ability to share, manage, protect and communicate data easily and securely.

HDS is a service that allows staff from schools and administrative units to salvage, secure, protect, share and better maintain their data. The service is provided for access from within the entire UTAS network but in this release the focus is on the management of administrative data. In future months HDS will expand into the provision of a data cloud providing sanitised and synchronised UTAS data from applications like HRMS and the Course & Unit database.

HDS allows departments to securely extend access to centralised data to numerous people. This means that an “all-hands-on-deck” approach can be taken to ensuring data remains current and up to date. Concerns over lost or corrupted files are avoided because all data and applications are stored in a central database protected by backup and recovery down to the last committed change.

By using HDS, data can be maintained and shared more efficiently and effectively due to:

- only needing a web browser to upload data, create

applications and run those applications

- the scalable nature of the service, which can grow to easily support large volumes of data and numbers of users
- the security features that include directory authentication, authorisation and data protection.

Another key benefit of HDS is that the service is easy to use. With a simple web browser staff can load spreadsheets and create reports in a matter of minutes. No programming experience is required. Training materials and wizards support staff through the process and face-to-face help is on hand to address any questions.

Currently ITR offers two levels of entry to HDS. The “classic level” is available to staff with some IT knowledge and can be used to create sophisticated data-driven web applications; whereas the “websheets level” is suited to staff with little IT knowledge and can be used to create small data grids and wiki-style applications.

For further information please visit the HDS website www.it.utas.edu.au/hosted-data/, email Hosted.Data@utas.edu.au or call the Service Desk on x1818 (6226 1818). To arrange for a demonstration to your school or department please contact the HDS Service Manager, Dian Ditchfield on 6226 6355.

UConference: A new wireless network for conferences

UConference is the name given to a new wireless network that is designed to provide wireless connections for conferences that occur on UTAS grounds. Introduction of the network means that holding conferences on UTAS campuses is no longer labour intensive for staff or restricted to people that have an affiliation with UTAS.

The service can be set up more quickly than was previously possible, as in the past ITR staff had to manually make infrastructure changes in order to provide internet connections outside the UTAS network. Now, with the recent improvements in wireless infrastructure, connectivity is possible through the existing infrastructure.

Providing internet access through UConference is also very efficient because the ability to connect to the network is limited to the duration of each conference. This is possible because access to the network is protected by a ‘Pre Shared Key’ or code. This code is created by ITR staff and is only active for the dates of each event. Because there is a new code for each conference the integrity of UTAS services are also maintained.

Security of the UTAS network is protected when using UConference because it is isolated from the main UTAS network. This means that when connected to UConference, even UTAS

staff will not be able to access the UTAS network unless they connect through the Virtual Private Network (VPN). The VPN system allows anyone with a UTAS account to securely access the UTAS network from outside UTAS. For more information about VPN and how to set up your computer to be able to use the VPN system visit www.utas.edu.au/itr/vpn/.

The UConference network has already proved its benefits. The service was first used in July by the Faculty of Business for their Young Entrepreneurs Challenge. This event involved more than 90 Launceston High School students all of whom came together on the Newnham campus to learn from local business people and UTAS staff. The ability to connect to the internet was a critical factor in the success of this event as students were required to undertake research to support activities including designing a business plan, preparing sales pitches and learning about marketing and finances. ITR expects that use of the network will only continue to grow into the future.

UConference is available for all conferences that promote research and/or education. For further information about booking the Uconference service please contact the Service Desk on ext. 1818 or email service.desk@utas.edu.au. If you are interested in booking UTAS facilities for your next conference or event please contact Janet Crack on 6324 3044.

Flexible security with Multiprotocol Label Switching (MPLS)

The use of MPLS around the world is increasing. UTAS will also embrace the technology soon, using MPLS to deliver security and flexibility.

Multiprotocol Label Switching (MPLS) is a mechanism in high-performance telecommunications networks that directs and carries data from one network to the next with the help of identifying codes (labels). MPLS makes it easy to segment a network by business function.

MPLS is used by service providers to allow for isolation between different customers. The protocol allows the service provider to create secure passages of information for different clients using the same infrastructure. Through MPLS, data separation between organisations can be maintained. For example, Telstra uses the same physical network infrastructure for the entire State Government but traffic between government departments e.g. DHHS, DOE etc does not mix.

For UTAS the use of MPLS will provide a means of supplying the different levels of security required by different areas. Another motivation for introducing MPLS at UTAS is to enable compliance with the Payment Card Industry Data Security Standard (PCI DSS); a newly-developed framework for developing a robust payment card data security process.

Often, reduced flexibility accompanies increased security. To meet the requirements of PCI DSS and to protect corporate systems appropriately some systems should be provided with a

greater level of protection. So that the academic and research departments can continue to experience flexible access to and from the internet the two areas can be allocated different "MPLS security domains". MPLS labels the traffic in different "security domains" so that the different security policies can be applied to the different areas.

A staged approach will be taken to implementation of MPLS technology at UTAS. For now, UTAS is in the very early stages, with ITR beginning to define different security domains. Creating these domains for each area of UTAS will continue throughout this year and into next year. When these domains are ready to be engaged ITR will liaise with respective areas to discuss any changes and concerns.



One of the challenges for service providers and home users is that the old system and the new system cannot talk to each other. This means that gateways have to be set up to ensure people operating with the new format can still access the IPv4 space. This is a challenge that UTAS will have to manage and, in response, ITR will have to develop such gateways.

Thankfully, UTAS is already prepared for IPv6. The core physical network is capable of running IPv6 and UTAS has already been assigned an IPv6 network range. According to John Mieztis, Manager of Communication Technologies, to ensure a smooth switch to IPv6 some systems will need to be upgraded and attention will need to be given to new servers and applications to ensure they can support IPv6 technologies. In particular, attention will be focused on in-house systems, as these systems will need to be modified to operate in the IPv6 environment.

John also has the following advice for UTAS staff who may be considering the purchase of new systems and software: "ensure that IPv6 support has been included in product specifications or will be included in the near future. Only by doing so will you be assured that your service can talk to all parts of the internet and that all parts of the internet can reach your service".

Changing addresses with IPv6

The world has run out of internet addresses. Experts say IPv6 is the answer, but what is it and what does it mean? What are the implications for UTAS?

A critical moment in history occurred recently when the Internet Assigned Numbers Authority (IANA) assigned the last internet addresses to the five regions of the world's Regional Internet Registries.

The moment marked the ominous end of Internet Protocol version 4 (IPv4), the protocol which has been in place since the birth of the internet. This protocol or 'old standard' as it is now often referred, could provide over 4 billion internet addresses. With these addresses now gone the world needs to switch to a new protocol, IPv6, a format that will allow trillions of internet addresses.

IPv6 has already been established and is waiting in the wings until people start to make the switch over from IPv4.

Security advice

IT Security, Cyber Safety, eSecurity are terms commonly heard in workplaces, schools and homes, but what are the risks and what can we do to prevent them?

Mark Zimmerli, UTAS' ICT Security Officer, says that "regardless of the robust security systems in place at UTAS, we all have a responsibility when it comes to ICT Security".

According to Mark everyone needs to understand how our individual actions can affect ICT Security and what can happen if a security breach occurs.

Mark explains that many people are unaware of when an ICT Security breach can occur and of what may happen as a result. He points out that the breaches of ICT Security commonly lead to: personal emails being read by others, email accounts being used to send spam, identities being stolen, accounts being blocked, unauthorised access to bank accounts and credit cards, data being stolen and employers' reputations being compromised.

Thankfully there are many simple ways that people can protect themselves. To reduce the risk of security breach, Mark suggests that UTAS staff should do the following:

- Change passwords regularly on the Change/Synch Password Page <https://password.its.utas.edu.au/>
- Make UTAS passwords at least 8 characters and use numbers, symbols or upper and lower case to increase the strength of the password. A strong password will protect your data, your identity and UTAS's reputation.
- Be aware that UTAS staff will never ask for login information via email or phone. If you get an email asking for your UTAS login it's a scam. If this happens notify ITR by calling Service Desk on x1818 (6226 1818) or forward the original email to Service.Desk@utas.edu.au.

- Ensure UTAS laptops are regularly connecting to UTAS networks to get operating system and antivirus software updates automatically installed.
- Do not share UTAS passwords with anyone else. Doing so can lead to breaches and is also against UTAS Policy.
- Enter passwords discretely. Do not let anyone watch you enter your password.
- Report suspected computer security incidents. All threats should be reported to the Service Desk by calling x1818 or 6226 1818. If it is an email threat please forward the original email that you received to Service.Desk@utas.edu.au.
- If you are not sure about an email, a suspicious phone call or software that is trying to install on your machine, ask someone you trust (i.e. your local technician or the Service Desk).

To ensure greater protection at work and at home, Mark and the Service Desk also suggest the following general hints:

- Run regular full virus scans on your computer.
- If you suspect your computer has been compromised, do not log on to any secure websites e.g. net banking.
- Never respond to email requests from anyone asking for your username and password either directly or via a link in an email.
- Use your commonsense and don't divulge information over the phone. No institution will ever ask you for your password. The

institution's systems already know your password.

- Never share passwords or write them down. If you cannot remember your password, keep it encrypted or as a vague hint in a secure location away from your Computer.
- Lock your computer when you are not using it (on a windows machine: CTRL+ALT+DELETE, select lock computer).
- Do not click 'OK' whenever a dialog box comes up, read the message and take time to understand it before deciding whether you accept or not. If you are not sure ask someone you trust.
- Ensure your home computer is up to date both with operating system updates and antivirus software.
- Use an up-to-date web browsing program and discretion when clicking on unfamiliar links. The web is a frequent source of infection, clicking on web links or pop-ups can cause malicious code to execute on your computer. Even with an up-to-date antivirus program not all malicious activities will be blocked. Stop and think first, if something looks suspicious, it most probably is.
- Always scan any files that you have just downloaded or copied to your computer before executing them.
- Do not open email attachments unless you know the source of the email. This is a common method by which viruses and other malicious software are spread.

"If staff follow these simple 'rules' the risk of ICT Security breaches at home and in the workplace are reduced dramatically" - Mark Zimmerli

ITR Office Locations

Cradle Coast Campus
University of Tasmania
Private Bag 3511
BURNIE TAS 7320

Newnham Campus
University of Tasmania
Locked Bag 1304
LAUNCESTON TAS 7250

Sandy Bay Campus
University of Tasmania
Private Bag 69
HOBART TAS 7001

General Enquiries
Telephone: 03 6226 6336
Facsimile: 03 6226 7171
Email: enquiries@itr.utas.edu.au