

New Mobile Phone Plan offers greater savings



Rob Smith - the man with a new plan?

Using their mobile phones may soon be the cheapest way for some UTAS staff members to keep in touch according to Voice Network Officer, Robert Smith. Under a new agreement between UTAS and Telstra all calls between mobile phones purchased by UTAS - for business purposes through IT Resources - are free.

Under the new agreement calls to other mobiles are charged on a per second basis, and individuals can now select from five bonus options to get the best deal for themselves.

“Under the old plan the bonus option was set at the group level and there was no opportunity for individual staff members to choose their bonus option,” Robert said.

Staff taking advantage of the new plan can choose between options that best suit them — including no flagfall charges; reduced call rates to any mobile phone within Australia; special rates for calls to other Telstra mobiles, cheaper calls to fixed lines or cheaper calls within business hours.

More details about the new UTAS mobile telephone plan are available online at www.utas.edu.au/itr/voicecom/.

Improving service delivery

Improving ICT service delivery is a major focus for many organisations and in particular IT departments within Australian universities. This initiative is being progressed through the adoption of an internationally recognised ‘best practice’ framework for IT Service Management known as ITIL – the IT Infrastructure Library. Some 60 per cent of Australian businesses are adopting ITIL, along with almost every Australian university.

So what is ITR doing at UTAS?

During the first half of 2006, all IT Resources staff, a number of Business System Administrators from other administrative sections and IT support staff from Faculties and Schools, attended IT Infrastructure Library (ITIL) Service Management Essentials training. This industry certified ‘best practice’ framework has provided staff with a common language and understanding of the processes required to effectively deliver ICT services to the University community.

Part of the process of implementing the ITIL framework has already seen the re-integration of the Service Desk back into IT Resources. From 17th July 2006, all phone and email support, in addition to Tier 2 and Tier 3 support has been managed and coordinated through IT Resources.

Another essential part of this process has seen a review of ITR’s Manager, Desktop Management Services role, occupied by Colin Broadbent, which will refocus on Service Level Management. As well as providing many central ICT services, ITR operates numerous Service Level Agreements (SLAs) for the provision of desktop support to various Schools and Faculties. Colin will also refocus in this area.

Any questions regarding the Service Desk or SLAs, in the first instance, should be directed to Colin on extension 6321 or email Colin.Broadbent@utas.edu.au.

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From the director

As we look towards the end of 2006, and with winter almost behind us, it is an opportune time to review progress against planned activities, and look towards 2007.

The first half of 2006 has been a busy time in Information Technology Resources (ITR) with many projects and key activities realising outcomes and results. A number of activities are ongoing and are expected to deliver results towards the end of 2006, and beyond.

An interesting point to note is that some projects - particularly those dealing with infrastructure - contain an element of subtlety in that they don't necessarily have a significant and transparent impact to users. Two examples of this include upgrades to the University's Internet connection and email servers.

On the other hand, activities such as the planning around improvements to the Student System, introduction of new computers to the Learning Hubs, or connection of a new building to the network have a very transparent impact on University operations.

In this issue of Insight, I'd like to briefly highlight a number of key activities for 2006, and provide an 'insight' into 2007 ICT planning.

ITR Review

ITR undertook an administrative review in April 2006 as part of the University's cycle of reviews of administrative areas. The review process proved worthwhile to ITR as it provides a great opportunity to examine the things we do, how well or otherwise we feel we do them, how our clients believe we perform and more generally how we contribute to the overall operations of the University. The first point above is achieved through a self examination and the production of a self assessment document, the second point is achieved through a submission and interview process, and the third through an independent assessment of the results of points one and two.

The review process is still underway, with reports and responses being provided to relevant University committees, however I would like to

highlight a few key aspects that I have observed from the process:

- the process involves a significant amount of preparatory work and critical self-examination,
- both positive and negative input is required to achieve a balanced and objective assessment of performance,
- it is challenging to appropriately contextualise positives and particularly negatives against the many and varied control boundaries,
- finally, the unerring commitment of staff toward the mission of the University.

TREN Connect

The first half of 2006 has seen significant progress in the introduction of a Tasmanian Research and Education Network (TREN) encompassing all major research and higher education institutions within the state. It is anticipated that these institutions will be interconnected by an optical fibre network early in 2007, providing high capacity bandwidth commensurate with anywhere else in Australia. This does of course include all major UTAS sites.

IT Infrastructure Library (ITIL)

The IT Infrastructure Library (ITIL) represents a worldwide best practice approach to IT service management. ITR, along with most Australian university IT departments, is adopting the ITIL framework as a benchmark for best practice and is seeking to redesign and improve a number of key business processes in line with the framework.

In the first half of 2006 all ITR staff, and a number of other business unit and Faculty/School support staff have received training in the foundations of ITIL. Following on from this training some key processes around the Service Desk function, jointly operated by ITR and the Library, have been redesigned to improve overall service delivery and efficiency.

The ITIL journey for ITR has just commenced and it will take some time to review and redesign our current business processes. Much of this work is to be



undertaken over the next 18 months.

2007 Planning

ICT planning for 2007 is well underway, informed by numerous activities including an ICT environmental scan and an assessment of necessary infrastructure and service upgrades. As usual it is a delicate balance between considering new and innovative services versus existing resource management versus mandatory upgrades to current services and support. Indeed anecdotal evidence indicates that only 30 per cent of ICT spend is on the investigation and implementation of new services. That this approach must also be aligned with overall University objectives adds yet another layer of complexity to the planning and decision making.

The various input sources to ICT planning do show that UTAS is not languishing behind other institutions in the main, has a range of ICT services comparable to other organisations, and does have a small number of areas where we do sit with the lead groups. It is however a highly dynamic environment within which we operate, and the ebbs and flows can make comparison challenging.

In closing, I once again welcome constructive feedback, positive or critical, on ICT services and support arrangements within the University.

A handwritten signature in black ink, appearing to read 'John Parry'. The signature is fluid and cursive, written over a white background.

John Parry
Director, IT Resources

Identity management: a new approach to an old problem

Identity Management is a relatively new term which is a recent incarnation of an age old IT issue; user names, passwords, authorisation and security. It has gained prominence through the current generation of web based systems and the sharing of information between increasingly complex systems. Identity and access management are now core ICT activities that are becoming increasingly complex and rate as one of the top ICT issues facing IT managers.

What is happening with Identity Management at UTAS?

IT Resources is actively developing a new regime of identity management to serve UTAS based on international standards that will provide future interoperability or sharing of information between UTAS and external identity management and authentication systems.

Just as with other organisations, UTAS recognises the need to develop effective identity management services and manage associated support issues. Implementing an identity management system isn't a trivial exercise and the costs can be significant – particularly for organisations that rely on large legacy (critical older) systems.

What are the advantages and benefits of identity management?

Before discussing some of the technical aspects of UTAS's approach to identity management, it is important to recognise the benefits presented by an effective identity management system. In addition to the more obvious benefits such as reduced administration and help-desk support and associated costs, improved productivity and appropriate access to services and information; frequently overlooked benefits include streamlined business processes, higher staff morale and an improved capacity to comply with governance regulations.

Ideally larger organisations, such as UTAS, will have automated processes for determining and allocating access permissions, such as passwords and user names, to new staff and students, and similarly for terminating access when employees leave or change roles and services are no longer provided. Employees may have a single user name and password and seamless access to the all systems and resources they need. The identity management system may also support trust relationships with suppliers, external business partners and clients who need or enjoy access to restricted resources.

The reality for many organisations is that user accounts are not terminated in a timely manner, allowing unauthorised and inappropriate access to resources and services; generic access accounts are shared; users must remember multiple logins to access a number of separate systems and closer more cooperative relationships with external parties are frequently relegated to the "would be nice - but too hard to do" basket.

What is the basis of the identity management technology at UTAS?

According to Adrian Dillon, Assistant Director and Manager, Computing and Distributed Systems, IT Resources is making significant moves toward a more tightly integrated and effective

identity management system for UTAS.

"Recently these efforts have seen the implementation of Lightweight Directory Access Protocol (LDAP) as a common method for authentication across systems. A Microsoft Active Directory infrastructure, which will integrate more tightly with Faculty and School systems than the existing Novell directory infrastructure, is already in place," Adrian said.

In other developments, progress is also being made with the mapping of existing Human Resources and Student and Academic Services business processes that relate to identity information. This will allow further work to be undertaken to improve overall effectiveness and efficiency of key information flows.

"Sorting out identity management issues isn't all about security and authorisation – another driver is the provision of new and improved services," Adrian said.

An example of a new emerging service is Eduroam, slated to be available late in 2006. Eduroam will enable UTAS staff visiting a number of Australian universities to use their UTAS IDs to access UTAS resources from the remote site via the local university network. Eduroam is built on the concept of multiple authentication systems sharing information. Through UTAS's participation in Eduroam, visiting staff from other participating institutions will also be able to use the UTAS network to access their home institution's network remotely. This service will prove particularly useful when combined with wireless networking.

Future planned developments around Identity Management also include:

- Migration of identity information from the existing 'bespoke' system (computer system written by UTAS for our own needs) to a commercial offering; and
- Implementing a Public Key Infrastructure (PKI), to allow individuals to more securely exchange data through the use of a public and a private cryptographic key pair that is obtained and shared through a trusted authority.

Public and Private Key Pairs?

Key pairs use two keys that work together - one to encrypt messages, and the other to decrypt messages.

When the intention is to allow many people to communicate securely with a single recipient the encryption key is made public so anyone can use it to create encoded messages. The decryption key is kept private so messages can only be decrypted and read by the intended recipient.

Key pairs can also be used to digitally sign messages. In this case the encryption key is kept private while the decryption key is made publicly available through a trusted source. Anyone using your specific decryption key can be confident that messages it successfully decrypts came from you.

The underlying principles were first noted by William Jevons - way back in 1874 - who linked one-way mathematical functions (functions that cannot be easily reversed) with enciphering.

In the Spotlight: IT Procurement Services



The IT Procurement Services team - Dani Streets, Cindy Palfreyman and Glenda Wardlaw.

Glenda Wardlaw, Manager IT Procurement Services, has been involved in the IT procurement office since 1985 when the University first had an agreement with Apple Computer for the

supply of computing equipment and 128MB Mac Plus machines were the go.

“Since then the office has expanded into a primary source of desktop computing equipment and software for most schools, faculties and departments within UTAS,” Glenda said.

The introduction of Oracle financials in 1998 saw a move away from Apple computers in administration areas — and it was around that time that the University began to fund the purchase of desktop pc equipment and lease it back to the departments through the University Lease Scheme.

The IT Procurement Services office is currently staffed by Glenda, Administration Officer Cindy Palfreyman and Administrative Assistant Dani Streets and currently serves two major purposes. In addition to taking care of the lease scheme the procurement office also handles desktop software contract negotiation, purchase and distribution.

“The Microsoft Campus Agreement is an excellent example of the work the office does behind the scenes,” Glenda said.

“It has enabled the University to be compliant for the provision of core desktop software and it also provides low-cost licences for key Microsoft software titles to be used at home for work purposes.”

The best part of working in the Procurement Office according to Glenda is that there’s always something new happening. “There’s always equipment upgrades and new software releases we have to know about, and new staff to meet so it’s always interesting. We’re all happy to assist staff with their purchasing and leasing options for equipment and software and web pages are maintained and can be found at: www.utas.edu.au/itr/procserv.

Are your drives driving you crazy?

Personal computers provided and supported by IT Resources are typically configured with two local and two network drives. If these drives are used properly you can be sure that your important data and information will never be lost.

The major differences between the drives are that the two local drives (C: drive and D: drive) are not backed up and therefore should not be used to store information that cannot be readily replaced. The D: drive can also be accessed by anyone logging on to your machine so it should not be used to store confidential material. The C: drive stores the computer’s operating system and standard applications and will not normally be available to you. If it is - then please resist any temptation to store files here.

The two network drives (N: drive and P: drive) are backed up by IT Resources nightly so your work or data can be retrieved if it becomes corrupted or is accidentally deleted. N: drives are generally accessible by all staff within a business unit and are used to share corporate data. Your P: drive is provided as a personal storage area and is only available to you*.

Following these tips should ensure that you will never lose work or important data

- For temporary storage of easily replaceable and non-confidential work or data - use D: drive.
- To store and make corporate information available across a department or business unit - use N: drive.
- For personal information or work in progress that you don't wish to share and cannot readily replace - use P: Drive.

*It should be remembered that under exceptional circumstances the contents of P: drives may be viewed by IT support staff in the course of their work.

Software selection requires a balanced view

With the ever-increasing prevalence of home computing and diversity of work requirements, we may all need to embark on a search for software at some point in time. Sometimes this is a relatively easy task as options are limited and the choice is reasonably obvious. At other times it may be a question of where and how to start looking through a maze of terminology, software companies, and great deals. Taking the time to break this challenge into a few simple steps, can provide a great solution with relatively little angst.

Software selection - what you're looking for...

In broad terms all software should be selected on its relative merits, i.e. how well it fits your needs regarding functionality, cost, support, maintenance, reliability, performance, scalability, useability, security, interoperability, and licence issues. Essentially you want to be sure that the software you select does what you want it to, and will continue to do so reliably for a reasonable amount of time without driving you crazy or making your system a target for viruses or hackers.

How to go about it

Selecting software is usually a four-stage process, with the first stage crucial to the success of the others. It is particularly important to understand (and possibly document) your requirements in some detail. Follow the four steps below as one example of a simple approach; identify your needs/requirements and possible options, review your options against your requirements, compare workable alternatives and finally select the best available option.

Identify your needs and options

Clearly identifying your needs and requirements is the first step in selecting any software package, be it a word processor, database, spreadsheet suite or an email server. You need to be clear on what it has to do for you and how you want to work with it. Does it need to share information with other programs? Open particular types of files? Do you need it to be highly configurable to suit a business process or can you alter the way you do things if necessary? Being clear on these points can save an awful lot of work and heartache later on.

The next step is to identify the options available to you. Frequently the problem is an over-supply of options, typically presented in the most glowing terms. Don't worry too much about fine detail at this point, but use one or two key considerations to keep your collection of options manageable. Cost, ease of use and the availability of support are frequently used factors you might consider.

Review

Having generated a list of possible options the next step is to gather supporting evidence that will help you develop a short-list of preferred options. Do some research and gain some independent advice about what you're looking at if this is available to you. Depending on the importance and complexity of the purchase this process could take a few minutes, weeks or months. It is really important to checklist the options against

your requirements. Through this approach the best options often become clear very quickly.

Compare

With background material in hand the next task is to develop a shortlist of the leading options and analyse them in more detail to determine each alternative's relative strengths and weaknesses. Going through this detailed comparison later in the selection process helps avoid two major stumbling blocks - being fixated on a particular solution before you have a fully-formed idea of your needs, and overlooking important factors that might become apparent in the review stage. Where possible road test solutions and find out if the reality matches the literature..

Selection

All going well you'll probably discover only a couple of the short-listed alternatives deserve serious consideration and perhaps one option will really stand out as the most suitable candidate for purchase. If you must choose between alternatives then decide on the criteria that will separate the short-listed alternatives and work through each alternative objectively until you can judge which is the 'best option'. In the end having followed this, or a similar process, you can be reasonably satisfied that once you reach your decision it will be both informed and valid.

On licensing, opensource and proprietary software

Whatever software you choose you should always be aware of all restrictions and licence conditions governing the use of the software - certainly before you install and use it. The most common licensing terms you are likely to come across are shareware, freeware, opensource and proprietary software.

Shareware is typically made available for download on a limited trial basis — along with a requirement that if you decide to keep using the software you will register and pay for it.

Freeware refers to software that is made available to you with no requirement for payment.

Open-source software is usually provided with the software's source code so the program can be studied, modified and sometimes redistributed without any royalties being payable to the original software developer. If you want to get an idea of the number and types of applications that are available through opensource licences visit www.freshmeat.net.

Proprietary software is provided under licences that prohibit the examination, modification or redistribution of the program.

It is important to remember that both opensource and proprietary licensing models are commercial in nature and that opensource does not necessarily mean 'free'. While it is true that some opensource programs are available at no cost, the term 'free' when used in relation to software often means that you are relatively free to use the program as you wish — only after you have paid for it.

Project Updates

E-Learning Media Systems

The iLecture pilot has expanded for semester 2 and is now installed in 12 lecture theatres across the Hobart and Launceston campuses. The number of units using iLecture has increased four-fold since the conclusion of the semester 1 pilot. A survey of students (780 participants) near the end of semester 1 brought with it some interesting and occasionally predictable results.

A key finding of the survey was that a large majority of student respondents (93%) wanted more online recordings to be available via iLecture. An increase in iLecture

functionality to incorporate media such as PowerPoint and overheads from lectures was also widely supported. The survey also found that 30% of student respondents indicated that they brought their own computer on campus to use for study.

IT Resources is currently working to make streamed media from the iLecture system available through the University's wireless network to better meet student needs.

For more information about ELMS please see the website <http://www.utas.edu.au/elearning/>

ITR/AMS/F&BS Hobart Co-location

Many people would be aware that ITR, Asset Management Services and Finance and Business Services on the Sandy Bay campus will soon co-locate to a refurbished Corporate Services building (formerly the Asset Management Services building). A key component of that building will be a new Data Centre, accommodating an array of key University computer systems. Significant specification changes with the University's new High Performance Computer (HPC) meant a revisit of the Sandy Bay Data Centre specification before works could be completed.

The development of the finalised specification document did take some time, and involved the use of external Quality Assurance consultants. This revisit of the specification has impacted on the project's timeline and a firm handover date is still to be provided by the building contractors.

IT Resources staff have commenced the process of ensuring that all documented system dependencies are current and accurate to enable, if possible, a phased migration to the new data centre in early 2007. Current estimates put the Corporate Services Building handover date as late January or early February 2007. The feasibility of a move at this time will need careful consideration given the critical business functions that rely on access to the computer systems.

Watch out for more information on the move and any related impacts on services over the coming months.

It is interesting to note that numerous Australian Universities have recently upgraded their data centres or are planning to do so.

New UCONNECT CD released

The latest UConnect CD contains a range of useful software titles and information designed to assist students and staff connect to and make maximum use of the University's electronic learning and research resources.

The collection includes software for both PC and Macintosh systems and contains web browser, anti-virus and media

player applications and system software needed to connect to online services such as WebCT.

Copies of the CD are available from the UTAS service desks at all three UTAS campuses or via request from the UCONNECT website. www.utas.edu.au/uconnect

New ITR Website Now Online

ITR's new website has been designed in keeping with best practice and the University's web visual standards to make navigation more consistent and information more accessible. New features such as the site map and service catalogue pages in particular have been added to make finding what you need to know faster and easier.

We have endeavoured to minimise changes to existing links and new content and services will be progressively added in the near future. If you are looking for something and cannot find it, or notice a link is no longer operational please contact Jeff Appleton, Communications and Policy Officer, by email or on ext 6359.

Staff Profile



Mark Zimmerli
ICT Security Officer

With incumbent ICT Security Officer Terry Walker on a 12-month leave of absence, Mark Zimmerli was recently appointed to fill the position.

When asked what first interested him in the role Mark's response was typically enthusiastic and direct.

"It was just too good an opportunity to miss," he said.

"But really - I've been with the University for nearly ten years now, eight as a student gaining a BComm BIS and working towards my PhD."

Taking on his new role with ITR has meant that the PhD has been put on the back-burner for a year. According to Mark this wasn't a difficult decision.

"Practical experience is incredibly valuable in developing professional credibility — and it's an awesome opportunity to put the ideas and theories I've been studying to practical use."

The complexity of the job is another prime attraction.

"A number of interesting paradoxes are involved in IT security — and it is challenging to balance what is desirable against what is feasible and realistic.

"My role also has a mixture of hands-on and policy development work and I think many people would be surprised at how cooperative managing ICT security issues is. Enjoying working with people really helps."

A major goal of IT security is to make information and services available where and when they're needed.

"The natural desire is to tie everything down to minimise risk — but being too restrictive will make people's jobs more difficult and they will end up working against you.

"It's an interesting dilemma," Mark said.

Mark has a penchant for red and is developing an interest in 70's and 80's heavy rock. Ferrari, Arsenal and St Kilda also rate highly on his list of favourite things.

And his favourite film? - *The Usual Suspects...* naturally.

We're a talkative lot...

In addition to 39,000 calls from mobile phones nearly 500,000 call records are generated on the PABX systems on UTAS campuses every month. And this figure does not include internal calls between Cisco IP phones as these calls bypass the PABX system.

In July 2006, we made 26,300 calls to mobile phones and 205,875 registered calls between 4-digit UTAS extensions from the Sandy Bay campus alone. We also accessed the voicemail system 15,800 times.

In addition to providing and maintaining the infrastructure needed to connect all these calls, ITR's Communications Technology staff currently support 3500 fixed line extensions, 1000 Cisco IP phones, 470 mobile phones, 130 DECT (cordless) telephones and 40 PDAs.

Newnham campus typically generates a shade under 30 per cent of the University's total telephone traffic; Sandy Bay 70 per cent, and Cradle Coast Campus the balance - around .5 of one per cent.

Wireless Network Access Areas

Wireless network coverage on UTAS campuses continues to expand as more access points are installed.

The wireless network provides secure, easy and flexible access to a range of web-based services and the Internet.

Visit <http://www.utas.edu.au/uconnect> for more details on how to go about connecting your laptop to the network and where access points are located.

The blue and white wireless logo below can be found on posters and entrances around campus where the wireless network is available.



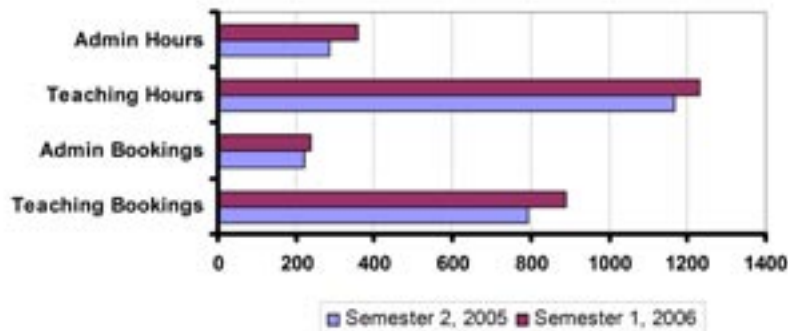
ICT Dashboard: service delivery by the numbers

The information provided is intended to indicate the scale and scope of some of IT Resource's operations. All figures and data provided are approximations.

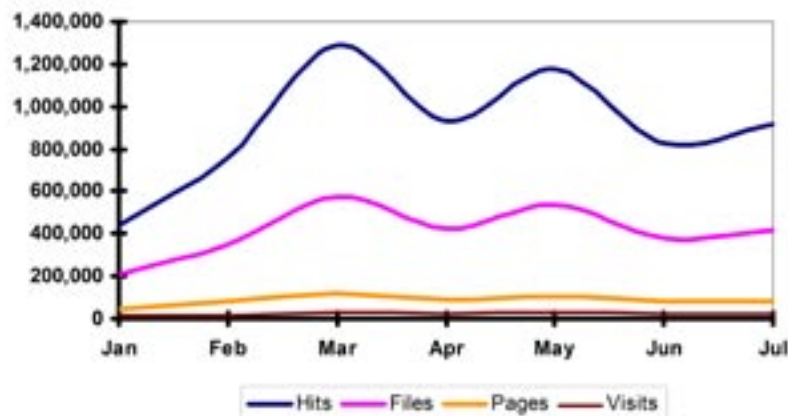
Wireless Network Users - 2006



Video conference Bookings and Hours



Web Visits - utas.edu.au (Daily Average) - 2006



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

ITR Building, Clark Road
University of Tasmania
Private Bag 69
HOBART TAS 7001

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