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Standing in front of the high-resolution display are (l-r) Professor Bernard Pailthorpe, the CEO of the Queensland Cyber Infrastructure Foundation (QCIF); and Chris Willing, the access grid manager of QCIF.

PHOTO: QUEENSLAND CYBER INFRASTRUCTURE FOUNDATION

Video stream demonstrates high-speed broadband

Broadband speeds several hundred times faster than conventional broadband connections were achieved at the University of Queensland (UQ) last month.

The university streamed live images at a resolution of 4K – which has 4096 x 2160 pixels, about four times the resolution of high-definition television – to sites in Europe, Japan and the US. The high broadband speeds were reached with the help of the Australian Academic and Research Network

The event was part of the Queensland Cyber Infrastructure Foundation (QCIF) participating in the Broadband Challenge

at the Super Computing 08 conference in Texas.

The images were shown on the OptiPortal, a wall of LCD screens with customised image-viewing software developed by the university and the Californian Institute of Technology. It has been used in the field of brain research.

In other news, the university's school of information technology and electrical engineering announced two new postgraduate programs for 2009 – the master of engineering (management) and the master of information technology (management).

The master of engineering (manage-

ment) combines postgraduate subjects in software and electrical engineering in fields such as power systems and microwave telecommunications, with studies in business management.

The master of information technology (management) aims to develop students' skills in IT application development along with business management.

Students can take IT courses including web design, information systems development or database technology, and business courses such as accounting, human resource management or information analysis and design.

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www.engineersaustralia.org.au/learned-groups/colleges/iteec-college/publications/publications_home.cfm

New degree with earn as you learn

IBM has partnered with Charles Sturt University (CSU) to offer a new information technology degree.

Launched at the CSU Bathurst campus, the bachelor of information technology (business services) will be offered from the start of 2009.

It will give students a mixture of technical skills such as programming, database skills and web development; and business skills such as organisation and management.

The degree does not contain a specific focus on mathematics, in contrast to some IT degrees at other universities. Students will also complete one year of project work carried out with a partner organisation.

"We are currently in the midst of a

global shift towards a services economy," said Kaaren Koomen, government relations director for IBM Australia and New Zealand.

"In the next decade, right across the world, nearly a hundred million jobs will be created – and most of them will be in services.

All 22 students accepted into the new degree will be fully supported by scholarships funded by IBM, Country Energy and the NSW Department of Lands.

The degree will incorporate flexible delivery to facilitate work experience and will be taught at CSU's Bathurst Campus by CSU academics and IT professionals, including those from IBM.

Researchers in €8.9m internet project

National ICT Australia (NICTA) is working on an €8.9 million project led by the European Commission (EC) which aims to research new designs for testbeds, the experimental facilities used by researchers to develop new technologies for large networks such as the internet.

Called OneLab2, the project began in September and will finish in December 2010. It is the largest of 14 projects inside the EC's Future Internet Research and Experimentation (FIRE) program.

NICTA is the only Australian organisation in the OneLab2 consortium. Other participants include British Telecommunications, Alcatel Lucent France SA, and universities such as Tel Aviv University and the University of Basel.

The project aims to improve productivity for organisations researching internet technologies. These groups often build their own test facilities which takes time and effort away from the research. The project is looking at ways to design testbeds so that they can easily be combined and re-used.

The research component given to NICTA will look at the challenges the internet faces in connecting to a growing number of wireless devices.

In general, the FIRE program will reconsider the basic architecture of the internet, to see if it can be improved to cope more effectively with new requirements, especially the demands of wireless technologies, which it was not originally designed to support.

"The internet wasn't originally designed with mobility in mind," said NICTA's networked systems research group manager Max Ott. "It is a capability which we have glued onto it."

It is envisaged NICTA's participation in the project will lead to an internet that is better understood, more secure, and more prepared for future technologies as it expands.

"We want to make sure that issues that arise, for instance, due to our remote location, are as important as any other requirement," Ott said.

Internet in fast food stores

Sydney company Earthwave has announced it has secured a three-year contract to deliver internet services to over 720 McDonald's stores across Australia.

The company's Clean Pipes security framework will form the underlying framework for the internet service, de-

signed to benefit the fast food chain's 1.45 million daily customers.

It involved a multimillion dollar investment by earthwave to develop a layered security architecture including firewalls, network intrusion prevention systems, distributed denial of service protection and web protection mechanisms.

Long range wireless sensing and control

An Australian collaboration has designed and commercialised an integrated field-based wireless sensor network (WSN) which collects data from large areas.

The Fleck sensor network, the result of a collaboration between the CSIRO and Tasmanian-based company Datacall Telemetry, works by having sensors in the field gather information and deliver it to a server using the 3G network and the internet.

The network can be used in gathering data on tidal flows on a river system, localised temperature and water usage in an irrigation system, or monitoring vibrations and sounds.

“Until recently, gathering this information had involved installing traditional telemetry nodes to collect measurements across large areas with multiple sensing nodes, made large scale, concentrated sensing networks expensive,” said Datacall Telemetry’s group sales manager Damien Virieux.

The Fleck WSN, based on ad hoc wireless mesh networking principles, solves this problem.

“What makes the network unique is its ability to pass data at distances up to



The network can be used in gathering data on tidal flows on a river system or monitoring vibrations and sounds.

700m from one node to another. The data automatically determines the most efficient route to and from the gateway,” he said.

According to the company, the WSN market is forecast to grow to \$5.3 billion worldwide by 2010.

Bionic eye being developed for vision-impaired

Clearer sight for the vision-impaired is the goal of a partnership of research institutes announced last month.

Bionic Vision Australia is aiming to develop a bionic eye to improve the sight of people with degenerative or inherited retinal disease.

Its members include the University of Melbourne, the University of New South Wales, the Bionic Ear Institute, Centre for Eye Research Australia and the Victoria Research Laboratory of National ICT Australia (NICTA).

The bionic eye is designed to replace the function of damaged light-sensing cells in the eye. While the clarity and definition of vision will not be equal to normal sight, the device will allow patients to detect large objects and, in time, read and recognise faces.

The consortium has submitted a detailed plan and funding request to the federal government to enable it to undertake the required research and early clinical testing. The governments of New South Wales and Victoria have provided support to the consortium’s development of the plan.

The proposal follows an 18-month feasibility study. Public interest in the bionic eye at this year’s Australia 2020 Summit

led to it being deemed a “big idea” worthy of consideration for national pursuit.

The consortium proposed having a first advanced prototype ready for the first human implant by early 2012 that delivers significant benefits to patients with severe mobility and light perception difficulties. This device is the result of research undertaken over a 10-year period by the Australian Vision Prosthesis Group at the University of New South Wales. An enhanced second prototype developed at the Victoria

Research Laboratory of NICTA could be available for the first human implant by late 2013 and would provide further improved quality of life for patients where image perception is the primary consideration.

Over 50,000 Australians have severe to profound vision loss. The major cause of severe vision impairment is degeneration or death of the cells in the eye that receive light signals. It has been estimated that the cost of severe and profound vision loss in Australia is about \$3 billion every year.

Australian telco participates in advanced networks trial

Telstra and US company Juniper Networks have announced one of the world’s first multisite carrier field implementations of the TM Forum’s IPsphere framework. The TM Forum IPsphere Field Trial aims to demonstrate advanced IP services.

Using a network supplied by Juniper Networks and Net One Systems, Telstra’s IPsphere field implementation was in Sydney and Melbourne.

The implementation will play an in-

tegral role in developing its Application Assured Network (AAN) initiative.

Telstra’s AAN initiative defines a vision for a network capable of dynamically dimensioning itself to support any customer application requirement, such as bandwidth, delay, jitter and QoS.

IPsphere capabilities complement and extend the AAN vision by enabling new ways of creating advanced services across partner boundaries.

Defence savings on aircraft upgrade

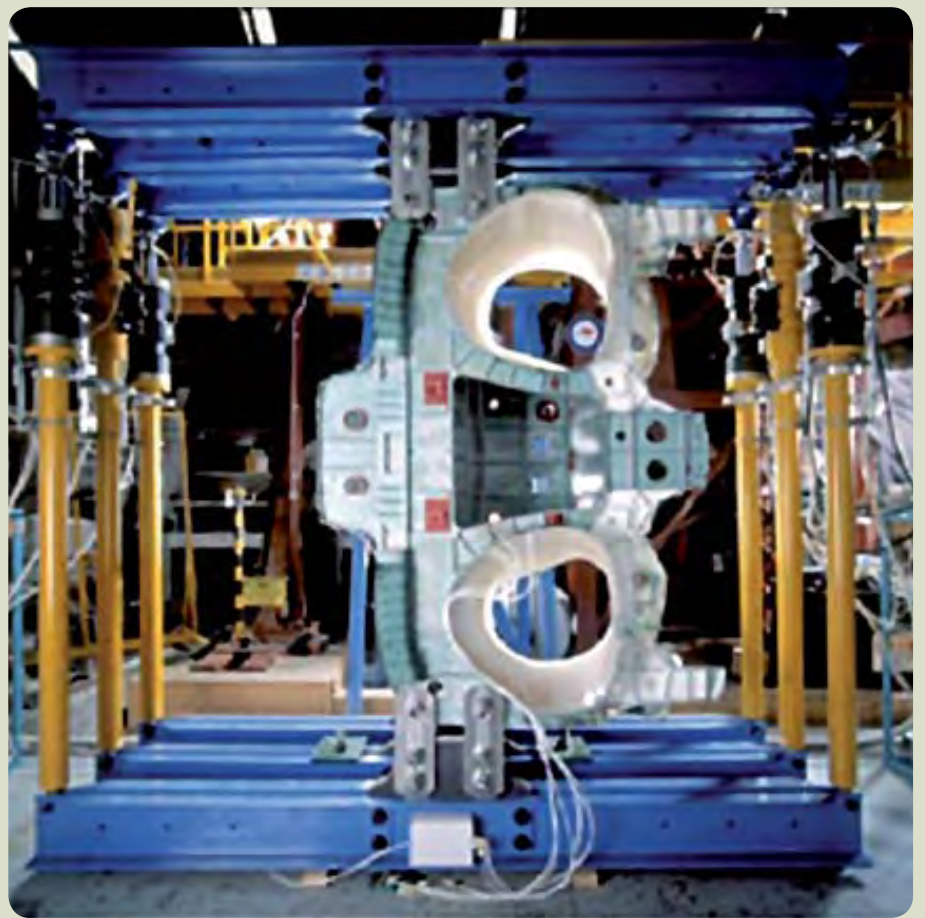
A program to test the centre barrels of F/A-18 Hornet fighter planes owned by the Royal Australian Air Force could produce \$400 million in savings from the Defence budget.

The program is a joint effort undertaken by Defence, QinetiQ-Aerostructures and Fortburn while analysis was done by the Defence Science and Technology Organisation (DSTO) and the Defence Materiel Organisation (DMO).

The leading edge fatigue testing and analysis conducted by DSTO determined that the centre barrel structures of the RAAF's F/A-18 aircraft were not as fatigued as originally anticipated. It has shown that the actual life of the Hornet centre barrels is 10%, or 2 years, greater than originally certified.

This could reduce the number of F/A-18 Hornet aircraft requiring replacement of the fuselage centre barrel from 49 to just 10. Reducing the number of centre barrel replacements has increased the availability of aircraft for operational use.

The DSTO conducted full-scale fatigue testing of ex-service centre barrels as part of the structural refurbishment program for the F/A-18 fleet in order to attain a more accurate assessment of the fatigue life of the centre barrel.



Reducing the number of centre barrel replacements has increased the availability of aircraft for operational use.

Tasmania moves towards greater broadband competition

Aurora Energy and Basslink have signed a contract to deliver nationally-competitive broadband services to Tasmania.

The agreement was signed in Hobart last month by the chief executives of Basslink and Aurora, Malcolm Eccles and Peter Davis.

The companies have a detailed implementation program over the next few months.

The optic fibre links are expected to

be operational early next year, with commercial services to commence in the first half of next year.

The joint agreement will mean Basslink and Aurora will both compete with Telstra and with each other in providing wholesale capacity between Melbourne and Tasmania's main population centres.

It aims to bring competition to Tasmanian broadband telecommunications. Tasmanian customers will be able to

choose a provider to carry high bandwidth telecommunications across a fibre optic link between the mainland and Tasmania's on-island TasGovNet fibre and Aurora's fibre network.

The on-island backbone was installed along with the gas pipeline from George Town to Launceston, south to Hobart and across the northwest to Port Latta, when Tasmania was connected to the national gas network by Duke Energy in 2001.

Company commits to new telecommunications code

The Communications Alliance has announced that Hutchison 3G Australia has become the first signatory to the new code designed to protect telecommunications consumers.

The Telecommunications Consumer Protections (TCP) Code was developed by Communications Alliance to

ensure that residential and small business markets have optimum consumer protection rules across a range of areas.

The code covers a broad range of consumer protection matters including advertising, point-of-sale information, fair consumer contracts, billing, credit management, customer transfer and

complaints handling.

By consolidating these protections within a single code, using simple language and uniform definitions, it is intended to enhance consumer protection by simplifying code compliance and ensuring consistency of interpretation.

Sydney students sell company to web video giant

Two former University of Sydney students, who sold their web company Omnisio to YouTube last year, have been named Young Alumni of the Year by the university's Faculty of Engineering and IT.

Ryan Junee graduated from the University in 2002 with a first-class honours degree in computer engineering and a bachelor degree in commerce.

The second alumni Simon Ratner graduated in 2003 with first-class honours degree in electrical and software engineering.

Ratner and Junee cofounded the web company Omnisio with Australian Julian Frumar. Omnisio developed technology that enables users to mix online videos and add comments.

After the company was sold to YouTube in 2008, Ratner took up a role as a software engineer at YouTube. Junee is a product manager at the company, leading the development of new features for community engagement.

He is also an executive committee member of the MIT/Stanford Venture Lab which is a non-profit group that promotes the growth of high-tech entrepreneurial ventures.

The awards were established in 2007 to honour former students of the Faculty of Engineering and IT who have shown outstanding creativity, dedication or leadership in developing their careers.



Simon Ratner and Ryan Junee sold their company to YouTube.

Alert system for natural hazards wins award

Indji Watch from iintegrate Systems has taken out the innovation and commercialisation category at the 2008 Asia Pacific Spatial Excellence Awards. The event recognises outstanding achievements in the spatial information industry.

The software monitors natural hazards and sends alerts when infrastructure is under threat.

It assists responses for emergency management for earthquakes, bushfires and electrical storms.

It works by showing emergencies on a map that continually updates with new information. Layers of infrastructure, such as power lines, schools and field staff locations, can be overlaid on top of this. Users can then allocate resources where they think it is needed most.

The software can track the path of storms, bushfires and other emergencies, automatically sending SMS and email alerts and automated phone calls and pager messages, telling key staff when something is

under threat.

For the past year, it has been monitoring the eastern seaboard electricity network, analysing up to 80GB/month of data. It also serves as the first line of defence against lightning strikes for several oil and gas companies.

Recently, an upgraded version 2 of the software was completed. Work on the

upgrade began in 2007, funded by an Aus-industry Commercial Ready Grant.

The new release uses Microsoft's Virtual Earth, .Net3.5 and SQL Server 2008 Spatial and Silverlight technology.

The name comes from the word meaning "close to" in the Aboriginal Nhandi dialect which was used around Shark Bay in Western Australia.

E-waste recycling facility launched

A recycling plant for electronic rubbish such as computers and televisions has been opened in Sydney.

Called the Sims e-waste recycling plant, it is expected to divert as much as 20Mt of electronic waste from landfills when it operates at full capacity.

At its opening, it was visited by environment minister Peter Garrett.

At the recent meeting of the En-

vironment Protection and Heritage Council in Adelaide, ministers agreed to develop a national policy to deal with Australia's increasing volumes of waste.

A recent snapshot of waste and recycling trends in Australia showed the amount of waste Australia generates has increased by 28% between 2003 and 2007.

Engineers give residents a lift

The designing of a residential lift was the subject of a recent ITEE College Joint Electrical Program held in Hobart this year.

As part of the program, a site visit was held to view a residential lift which retired engineer Peter van Emmerik installed at his Lenah Valley home.

The lift, a product of The Residential Lift Company, was designed by van Emmerik with the electronics design being done by Jim Hursey, who is also a retired engineer. SEMF provided electrical, mechanical and risk assessment certification services.

Van Emmerik stated that after a career designing industrial lifts, he wanted to create a lift for people who could no longer manage the stairs in their home and preferred not to move houses to overcome this difficulty.

For this reason, the cost of the installed lift needed to be less than the cost of moving house. The lift needed to be discreet, able to be fitted into small spaces and not require significant customisation to be installed.

This has been achieved with the unit costing around \$19,000 with installation costs. To date, 26 of the lifts have been sold. A larger carriage unit is being developed to handle wheelchairs.

The design has a lift carriage which on extruded guides which pass through a hole formed in the floor of the upper level. Individual installations require the length of the extruded guides to be tailored to reach from the lower level floor to the upper level ceiling.

The lift's safety features include the use of continuous operator control on lift travel, two independent hoist ropes, safety grippers, two safety light beams across the lift entrance to prevent shearing, a safety pan below the lift to AS 1735.15, a load sensitive floor above the lift and several travel and overload switches. The top cap of the lift remains in the floor to block the hole when the carriage moves to the lower floor. For this reason the upper surface of the top cap can be carpeted to match the existing upper floor covering.

While a basic two-person lift has a capacity of 170kg, it is calculated on a 250kg load as this is the minimum allowed under the regulations.

According to Hursey, the electronics/electrical design systems allowed the unit to connect into an ordinary 10A general purpose output. It uses a 550W single to three phase variable frequency converter to drive a three phase motor. If the mains power fails, a battery provides the power to return the carriage to the lower level.



The pulley system of the lift.

South Australian honoured by college

Professor Alex Grant is the 2008 recipient of the IREE Neville Thiele Award, which is the most prestigious individual award conferred by Engineers Australia's Information, Technology and Electronics Engineering College.

Grant comes from South Australia, where he is professor of information theory and director of the Institute of Telecommunications and Research at the University of South Australia.

He was a NICTA fellow in 2004. At 32,

he was the youngest professorial appointment ever made at the University of South Australia.

His work has achieved a blend of theoretical and practical design and development. The judging panel for the award agreed that Grant's work will have longterm benefits to society, not only in wireless communications but for other communication technologies that have the electromagnetic spectrum as the fundamental element in their operation.

A life of dedication to railways

Obituary

Trevor Ellis

January 16, 1940 - July 14, 2008.

Trevor Ellis spent most of his engineering career at Queensland Rail (QR) as the chief signal and telecommunications engineer. During his 38 years there he was instrumental in applying computer technology, optical fibre and microwave radio technology to the state's railway network. He was in charge of the railway's telecommunications network and played a key role in developing the network's centralised traffic control system.

He graduated with an electrical

engineering degree from the University of Queensland which he attended on a railway scholarship.

Ellis retired from QR at 54 but continued to serve it as a consultant as well as consulting for NSW Rail and British Rail. He served as chair of the International Institute of Railway Signal Engineers and chair of the Australian Telecommunications Users Group.

He is survived by his wife and three children.

For a more comprehensive list of engineering events, visit Engineers Australia's online events calendar at www.engineersaustralia.org.au/events

Courses: **Asset management** (2 days) Adelaide 12 May, Brisbane 25 Aug, Canberra 28 Jul, Darwin 28 Apr, Melbourne 10 Nov, Perth 5 May, Sydney 20 Oct, Townsville 24 Nov; **Contract management** (2 days) Adelaide 24 Mar, 15 Sep, Brisbane 10 Mar, 23 Jun, 8 Sep, 8 Dec, Canberra 11 Aug, Darwin 10 Nov, Hobart 28 Jul, Melbourne 24 Feb, 2 Jun, 25 Aug, 24 Nov, Perth 3 Mar, 16 Jun, 1 Sep, 1 Dec, Sydney 17 Feb, 26 May, 18 Aug, 17 Nov, Townsville 31 Mar; **Financial management** (2 days) Adelaide 15 Jun, Brisbane 11 May, 16 Nov, Melbourne 2 Mar, 17 Aug, Perth 12 Mar, 12 Oct, Sydney 4 May, 7 Dec; **Managing self and leading teams** (2 days) Adelaide 19 Mar, 12 Nov, Brisbane 9 Jun, 19 Nov, Canberra 29 Apr, Darwin 24 Sep, Hobart 29 Oct, Melbourne 2 Apr, 10 Sep, Newcastle 25 Jun, Perth 21 May, 3 Dec, Sydney 12 Mar, 4 Aug, Townsville 30 Jul; **Project governance** (1 day) Adelaide 22 Jun, Brisbane 18 Jun, Melbourne 25 May, Perth 10 Jun, Sydney 2 Jun; **Project management** (2 days) Adelaide 26 Mar, 17 Sep, Brisbane 12 Mar, 30 Apr, 10 Sep, 12 Nov, Canberra 22 Jun, Darwin 7 May, Hobart 25 May, Melbourne 26 Feb, 4 Jun, 27 Aug, 26 Nov, Newcastle 11 Jun, Perth 5 Mar, 16 Jun, 3 Sep, 3 Dec, Sydney 19 Feb, 28 Apr, 20 Aug, 19 Nov, Townsville 2 Apr. *Inquiries:* The EEA Team, Engineering Education Australia 03 9274 9600, fax 03 9326 9888, email info@eeaustralia.com.au, web www.eeaaust.com.au.

Conference: Australasian universities power engineering conference (4 days) Sydney 14 Dec. *Inquiries:* web www.ee.unsw.edu.au/aupec2008.

Workshop: Foundations of open media software (2 days) Hobart 15 Jan 2009. *Inquiries:* web www.foms-workshop.org/foms2009.

Conference: Mid north coast amateur radio group (1 day) Coffs Harbour 18 Jan, 2009. *Inquiries:* 02 6655 2990, mob 0422 216 773, email radiosupply@hotmail.net.au, web www.mncarg.org.

Conference: Information online 2009 (3 days) Sydney 20 Jan, 2009. *Inquiries:* Emma Waygood 02 9437 9333, fax 02 9901 4586, email infoonline2009@conferenceaction.com.au, web www.information-online.com.au.

Conference: linux.conf 2009 (3 days) Hobart 21 Jan 2009. *Inquiries:* email contact@marchsouth.org, web linux.conf.au.

Exhibition: Central Coast Amateur Radio Club field day (1 day) Wyong 8 February 2009. *Inquiries:* 02 43402500, email ccarc@ccarc.org.au, web www.ccarc.org.au/fieldday/index.htm.

Conference: Software development conference 2009 (2 days) Wellington 26 Mar 2009, Melbourne 23 Mar. *Inquiries:* email info@softed.com, web www.softed.com/sdc.

Conference: VoiceCon Orlando

2009 (3 days) Orlando 30 Mar 2009. *Inquiries:* web www.voicecon.com/orlando.

Conference: 20th Australian software engineering conference (4 days) Gold Coast 14 Apr 2009. *Inquiries:* email aswec2009@itee.uq.edu.au, web aswec2009.itee.uq.edu.au.

Conference: Cebit 2008 (3 days) Sydney 12 May 2009. *Inquiries:* web www.cebit.com.au.

Conference: Sigmod international conference on management of data 2009 (4 days) Providence, US 29 Jun 2009. *Inquiries:* web www.sigmod09.org.

Conference: Emergency power supplies (3 days) Brisbane 22 Jul 2009. *Inquiries:* email sarah.montgomery@idc-online.com, web www.idc-online.com/cons/?country=Australia.

OVERSEAS

Conference: 5th international conference on electrical and computer engineering (3 days) Dhaka, Bangladesh 20 Dec. *Inquiries:* email icecetech@eee.buet.ac.bd, web www.buet.ac.bd/eee/icece.

Conference: Location-based services forum 2009 (2 days) Prague 15 Jan 2009. *Inquiries:* www.jacobfleming.com/conferences/telecom/location-based-services-forum-2009?partner=freelisting.

Conference: IS&T / SPIE electronic imaging 2009 (5 days) San Jose, US 18 Jan 2009. *Inquiries:* email customerservice@spie.org, web electronicimaging.org.

[org/?WT.mc_id=RCALENDARW](http://www.wt.mc_id=RCALENDARW).

Conference: International conference on knowledge networking in ICT era (3 days) Chennai, India 22 January 2009. *Inquiries:* email p_panneer@yahoo.com, web www.crescentcollege.org/pdf/international-conference.pdf.

Conference: International conference on computing, communication and control (2 days) Maharashtra, India 23 Jan 2009. *Inquiries:* email surve@frcrce.ac.in, web frcrce.ac.in/icac.

Conference: 2nd IEEE international conference on computer, control and communication (2 days) Karachi, Pakistan 17 Feb 2009. *Inquiries:* email nusrat@pnc.edu.pk, web www.ic-4.org.

Conference: IDC cloud computing forum (1 day) San Francisco 18 Feb 2009. *Inquiries:* web www.idc.com/getdoc.jsp?containerId=IDC_P17916.

Conference: IDC virtualization forum (1 day) New York 12 Feb 2009. *Inquiries:* web www.idc.com/getdoc.jsp?containerId=IDC_P17818.

Conference: Black hat DC 2009 (4 days) Vancouver 16 Feb 2009. *Inquiries:* +1 206 443 5489, fax 1 206 219 4143, email bh-regw@blackhat.com, web www.blackhat.com.

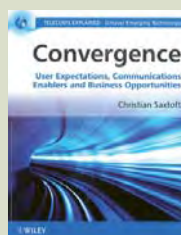
Conference: End-to-end solutions and platforms for the next generation of software as a service (1 day) New York 26 Mar 2009. *Inquiries:* www.idc.com/getdoc.jsp?containerId=IDC_P17807.

Conference: Interop (5 days) New York 16 Nov 2009. *Inquiries:* Kelly Stewart +415 947 6236, email kstewart@techweb.com, web www.interop.com.

Convergence: User Expectations, Communications Enablers and Business Opportunities

Christian Saxtoft \$75.41 + GST = \$82.95

Business-oriented engineers with an interest in convergence will find this book a useful examination of the rapidly changing communications industry. Clear summaries of key technology areas provide the backdrop for an extensive analysis of the expectations set by users and the challenges and opportunities this presents to companies. It bridges the fields of business, economics, technology and social studies in the analysis of business models and practices from across a range of industry segments.



Wireless Security Know it All

Newnes Wireless Team

\$63.59 + GST = \$69.95

The latest technologies – leading experts – proven real-world design solutions – all in one volume! This *Know It All* answers all your questions on wireless security, in a way no single book or author possibly could. Look inside to find comprehensive, practical knowledge about: Network Architectures – Definitions and concepts – RFID – Cellular Networks – Wireless LANS – Cryptography and much more.



CALL FOR PAPERS

Conference: 20th Australian software engineering conference (4 days) Gold Coast 14 Apr 2009. *Inquiries:* email aswec2009@itee.uq.edu.au, web aswec2009.itee.uq.edu.au.

Abstracts due: 18 Dec (industry paper). ■

Bamboo-covered notebook

Taiwanese notebook company Asus has launched its Bamboo Series notebook. The computers are clad in Moso bamboo panels which the company claims is more environmentally friendly for the machine's production, use and recycling and disposal. The touchpad has fibre patterns which imitate bamboo.

The notebook is available in a 12.1-inch model that weighs 1.57kg and an 11.1-inch model that weighs 1.25kg.

Both have Intel Core 2 Duo processors and DDR2 RAM. They use the company's super hybrid engine which the company claims can extend battery life between 35% and 70% as compared to notebooks with the same specifications but without the technology, and enable users to boost their systems' performance by up to 23%.

It achieves this by monitoring the power requirements of the notebook's components and automatically adjusting the power levels to match what is being consumed.

Other features include a WiMAX/WiFi Link 5100.



The computers are clad in Moso bamboo panels which the company claims are environmentally friendly.

Phone built for social networking

Phone company 3 Australia has launched its mobile phone INQ1 which integrates Facebook into the handset along with email, Skype and Windows Live Messenger.

The phone has high-speed download packet access capability and a live address book with friends' Facebook status and profile picture displayed against their contact details.

Facebook users can also place pictures taken with the phone's 3.2 megapixel cam-

era straight to their blog.

Other features include up to 327 hours of standby power and up to 324 minutes of talk time, Bluetooth, USB 2.0, an MP3 player, speaker phone, 50MB of internal memory and a 24 month warranty.

The handset includes a personal stereo hands free kit, USB cable, and CD-ROM for PC connection.

For more information, visit www.three.com.au/inq.

Microprocessor for intelligent buildings

Available from Dominion Electronics, Rabbit's new MiniCore 5000 microprocessor series consists of compact networking modules.

Available in pin-compatible wired and Wi-Fi versions, the MiniCore series allows for communications and networking applications such as energy management and

intelligent building automation.

The microprocessor features Ethernet, Wi-Fi and SRAM. It measures 31mm x 51mm x 3mm. It includes the pin compatible and interchangeable wired RCM5700 and Wi-Fi RCM5600W. Pin-compatible versions that support ZigBee and USB are also in development.

Improved workflow for documents

Aconex, which develops online information management for construction and engineering projects, has released a major upgrade to its Workflows module, which supports advanced document management in large

or complex project environments.

The module automates and regulates the movement of documents by specifying routing, editing and approval steps to be undertaken, as well as associated timelines.



The phone has high-speed download packet access capability.



The gateways can be linked to touchscreens.

Ethernet gateway products

Automation company Dynalite has launched the 100BT series of Ethernet gateways which places an Ethernet connection between a peer-to-peer communications serial bus network or control systems and third-party technologies, such as audiovisual and building automation systems.

With three models, the DNG100BT, DD-BG100BT, and DMNG100BT, the gateway series is available in several housing and mounting options. These include wall, shelf and DIN-rail mounting, with steel, polycarbonate and plastic enclosures.

The gateways support TCP/IP protocol

with static or IP addressing assigned by dynamic host configuration protocol. The gateway's routing mode enables multiple units to be linked using point-to-point or broadcast modes, while its integrated web server supports browser-based control.

The gateways can be linked to touchscreens. It has two power-supply options – units with an integrated dedicated power supply are available, while there is also an option for a unit that can be powered by the company's propriety DyNet network.

For more information, visit www.dynalite-online.com.

Dual-band firewall for businesses

Netgear has launched a new firewall for virtual private networks (VPN) aimed at small-to-medium-sized businesses.

The ProSafe SRXN3205 wireless-N VPN firewall improves the security of an internet connection. It supports wireless LANs and the ability for remote workers and offices to securely access the company network.

It combines dual-band wireless-N connectivity with two choices of VPN access – secure sockets layer (SSL) and IP security (IPsec).

The firewall can support up to five SSL VPN tunnels and five IPsec VPN tunnels simultaneously.

The SSL access enables secure, clientless, individual remote access to corporate data from any computer without needing to install a software client. It supports encryption algorithms and features an automatic cache cleanup after session termination to ensure protection and privacy of sensitive data.

The IPsec access delivers site-to-site tunnels connecting offices and supports legacy client-based remote access. It

protects against denial-of-service attacks and has packet inspection to curb hacker threats, URL keyword filtering, syslog support, and email reporting.

The firewall supports businesses transitioning from slower, legacy wireless networks to draft 802.11n networks.

The 5GHz radio band operating mode can create an overlay network that does not interfere with existing 802.11g and 802.11b networks.

The devices can then use the 5GHz radio band. Security features such as Wi-Fi protected access and 802.1x with Radius support are included. The device also includes LAN ports.

The auto detect function can connect to a user's ISP, the web-based ProSafe Control Centre is used for configuration, and the VPN wizard automates IPsec VPN configuration and creates secure connections to multiple sites. It is compatible with Windows, Unix, Apple and Linux.

For more information, visit the company's website at www.netgear.com.au or call 02 8117 6800.

Cellular IP routers

Paqworks have released a new range of Cybertec industrial cellular IP routers.

Cellular IP modems are designed for use with devices with legacy operating systems that do not support Ethernet or TCP/IP networks.

If the user's applications need to access remote devices through the Internet and cellular network, a cellular IP modem will allow the user to integrate TCP/IP architecture and wireless cellular technology.

The two switched Ethernet ports in the Cybertec 1220 models eliminate the need to use an external switch in many applications.

These devices also have a RS232 DB9 female data communications equipment connector, two RS232 DB9 male data terminal equipment connector ports and two digital in ports and two digital out ports.

The Cybertec Series 1000 model 1220 offers support for distributed network protocol 3 and Modbus over IP.

In addition, two optional digital in and digital out ports provide functionality similar to a remote terminal unit, which enables the devices to operate in circuit switched data modes.

The devices can be DIN rail or wall mounted. The device operates with a power supply from a wide input range of 10VDC to 60VDC.

Notebook geared for gaming

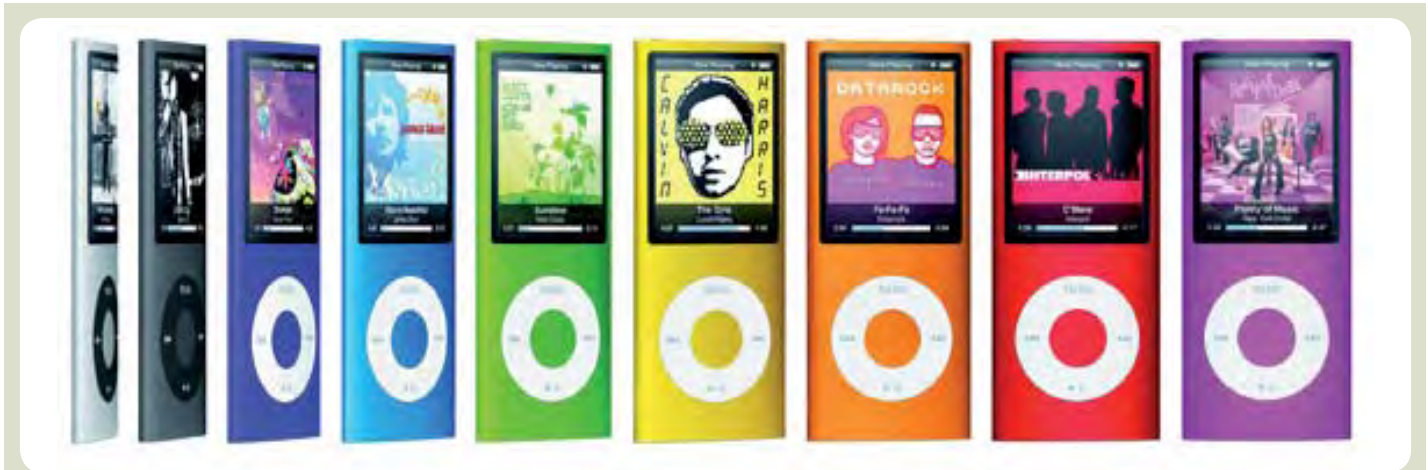
PC manufacturer Alienware has launched the M17 notebook which has the Intel Core 2 Extreme QX9300 mobile quad-core processor.

It is the company's first notebook with ATI CrossFireX multi-GPU technology, featuring dual ATI Mobility Radeon HD 3870 cards which have high definition video playback and DirectX 10.1 support.

The notebook has a 17-inch screen, 3GB of DDR3 memory and a 1920 x 1200 LCD screen. In terms of storage, it has dual 500GB hard drives linked in a RAID 0 configuration for a 1TB total capacity.

It has a matte black finish and the company's signature Skullcap case design.

For more information on the M17, visit www.alienware.com/M17.



The units can guess which songs from your music library sound good together.

New music players in nine colours

Apple has introduced the fourth generation iPod nano which is available in nine colours.

The units can guess which songs from your music library sound good together and

automatically create a playlist for them.

The music players have an improved user interface, portrait display and can automatically enter shuffle play mode when the case is lightly shaken.

They provide users with up to 24 hours of music playback or four hours of video playback and is available in a 8GB and 16GB model. For more information, visit www.apple.com.

Embedded controller

Siemens has released the modular Simatic S7-mEC embedded controller with pre-installed runtime visualisation software. In addition, the EM PC and EM PCI-104 expansion modules for additional hardware functions are available. These allow the controller to connect to PCs and allows the use of PCI-104 cards.

The controller is a turnkey automation solution, integrating a human machine interface and software controller. No software has to be installed during commissioning. By sharing a platform for interface and PC applications, the speed of data exchange is increased.

The controller is based on the S7-300 architecture and can be connected using the S7-300 modules in the central rack or remotely using Profinet or Profibus.

The PC module allows interaction between automation technology and the PC. By using standard media, PLC data can be used directly for further evaluations of production data in an office application.

On-board interfaces, such as the graphics interface or DVI-I, now enable a monitor to be connected in addition to operator panels or thin-client solutions. If there are considerable distances between the controller and visualisation device, a thin client is recommended.

To use the monitor in the immediate vicinity of the controller, the DVI-I port can be used.

Further interfaces such as slots for

SD/MMC and compact flash cards, USB for the connection of printer, mouse or keyboard, and serial interfaces for point-to-point communication are also available on the EM PC module.

The second EM PCI-104 expansion module permits scalability to further hardware interfaces in the PCI-104 format. This enables fieldbus modules for Profibus to be connected via high-speed I/O cards

or cards for special applications, such as sound cards for the output of spoken operating instructions in the event of error messages or when re-equipping a machine. As many as three different PCI-104 or PCI-104+ boards can be used within these modules.

For more information, contact Siemens on 131 773 or visit www.siemens.com.au or email customercare.au@siemens.com.

Mouse with new tracking technology

Microsoft has released its Explorer and Explorer Mini optical mice which have the company's new tracking technology called BlueTrack.

The tracking technology combines optical technology with laser tracking for added precision, allowing consumers to use the mouse on surfaces from a granite to carpet. It does not work on clear glass or mirrored surfaces. To see a video on the making of BlueTrack Technology, visit www.microsoft.com/hardware/bluetrack.

The mice are wireless and use 2.4GHz wireless technology to deliver reliable connections up to 6m away.

The snap-in minitransceiver allows users to take the mouse with them on the road.

The Explorer has a battery status indicator and a small charging base, while the Explorer Mini uses two AA batteries.



The tracking technology combines optical technology with laser tracking for added precision.

Both mice have a three-year limited hardware warranty.