

IBM® Australia Development Laboratory

A national software development laboratory providing world class product development and support.



A thriving technical community of software engineering, lab services and product support professionals.

Creating and delivering advanced technologies, intellectual property and product support expertise to world class standards.

Partnering with academia, industry and government to foster innovative, mutually beneficial research and development.



IBM Australia Development Laboratory

In recognition of Australia's capability in IT and software engineering, IBM® formed the Australia Development Laboratory (ADL) in July 2006. The ADL is a national development laboratory providing world-class software product development, support and lab services. It comprises more than 600 software engineers and technical specialists in nine locations around Australia.

A strategically important skills hub

Today, the ADL is at the forefront of innovation in areas such as virtual worlds, Linux®, identity management, application monitoring and web content management. In addition to working on the development of this technology, the ADL has built a base of skills in the application of this technology, collaborating with clients and business partners.

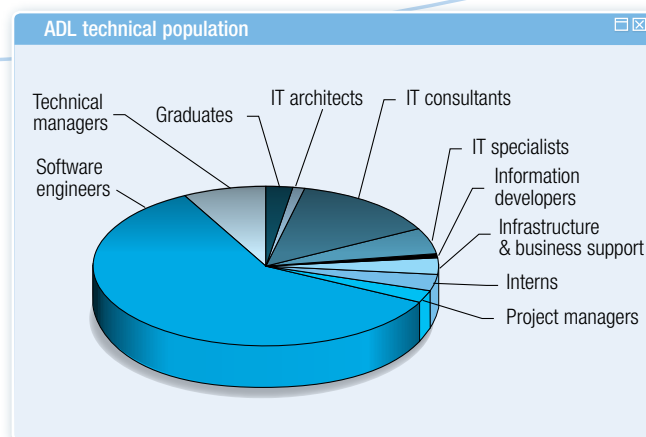
As part of a global network of IBM research and development labs, the ADL positions Australia as a key participant in the global supply chain for high value technical development, services and support skills.



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The ADL is a centre of innovation and technical excellence, contributing to Australia's exports and creating a pipeline of high-value technical expertise.

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The ADL also offers multi-lingual IBM software product support – globally. Indeed, nearly 80% of its workforce is involved in exporting expertise and technology into the world market, making the ADL a growing contributor to Australia's exports and GDP.

Just as importantly, given the current IT skills crisis, the ADL plays a vital role in developing a pipeline of technical talent. The ADL has academic relationships with many Australian universities, in the form of collaborative research, curriculum development, internships, scholarships and guest lecturing. By partnering with academia, the ADL is able to:

- Contribute to the development of technical excellence in the right areas of expertise across Australia;
- Support the quality of Australia's graduates by fusing their academic development with industry experience; and
- Apply research expertise in areas of mutual interest.

Adding value to IBM's Australian clients

The national presence of the ADL gives every Australian organisation access to world class development facilities and thought leadership. Both local and international clients also benefit from a 'follow-the-sun' support model, with the ADL's support team working with other IBM labs across the world to provide true 24/7 service.

Using progressive work practices and a networked model

The ADL uses virtual collaboration to drive innovation. Distributed teams, the virtual world, wikis and blogs are as integral to its work practices as email is to conventional organisations. Software engineers and product specialists regularly interact with peers across more than 75 IBM development laboratories worldwide. The ADL has also been leading the adoption of Agile software engineering methods and has pioneered the implementation of Kepner-Tregoe processes within IBM product support teams.

As an organisation, the ADL is highly supportive of individual development, with a number of staff currently pursuing post-graduate qualifications. This approach – supported by IBM's progressive work practices that allow, for example, team members to work flexible hours – makes the ADL one of the best places for top technical talent to work in Australia.

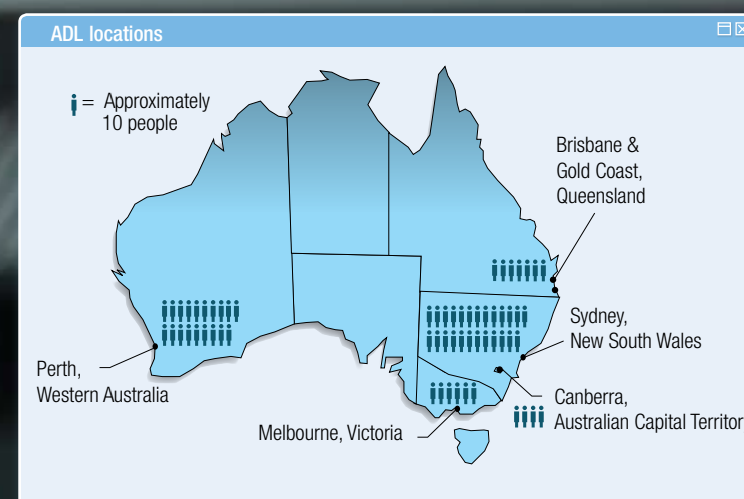
Towards a global workforce

The ADL models the practices required for Australia to succeed in the global economy: operating at the highest level of technical excellence; collaborating with Australia's leading academic institutions and major businesses; and developing a pipeline of talent to sustain its market presence. Its success to date demonstrates that Australia can attract the sort of high value work from the global market that will be essential to sustaining our economy through the next decade and beyond.



Glenn Wightwick

Glenn Wightwick
IBM Distinguished Engineer
Director, IBM Australia Development Laboratory



Haibo Wang, Advanced Software Support Engineer

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The national presence of the ADL gives every Australian organisation access to world class development facilities and thought leadership.

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From innovation to invention

The ADL is focused on developing and applying new technology. It makes significant contributions to IBM's intellectual property portfolio in the form of commercialised software products, patent filings and know-how.

In 2007 the ADL filed 96 patent applications: a five-fold increase on the previous year. Three ADL staff are Senior Inventors – a form of recognition achieved only by IBM staff who have a superior patent portfolio and a sustained record of contribution to IBM's intellectual property processes. In addition, ADL technical staff have published many tutorials, articles and white papers for use by both internal IBM staff and the wider technical community.

ADL development teams have also adopted the Agile development methodology which focuses on developing software through rapid cycles of innovation and collaboration. By applying Agile methods, the ADL Sydney team responsible for the development of the IBM Lotus

Web Content Manager (WCM) software shipped nine releases, submitted 28 invention disclosures and filed eight patents during the course of one year alone.

Many ADL teams also sponsor one or more scholarships or awards for undergraduates in local Australian universities. The ADL Tivoli® development team located in Perth sponsors 'Best Student' awards for Computer Science and Software Engineering undergraduates enrolled at Curtin University, Perth. The ADL's System z™ specialists – also based in Perth – have introduced an innovative on-line national programming competition to 'Master the Mainframe', following the success of their Perth-based System z Boot Camp. In addition, the ADL Canberra team sponsors an award for the best Linux project at the University of New South Wales.



Graham Bucknell, Software Engineer

ADL's academic relationships	
STATE	UNIVERSITIES
Australian Capital Territory	• Australian National University
New South Wales	• Macquarie University • University of New South Wales • University of Sydney • University of Technology, Sydney • University of Wollongong
Queensland	• Bond University • Griffith University • Queensland University of Technology • University of Queensland
Victoria	• Monash University • RMIT University • University of Melbourne
Western Australia	• Curtin University • Edith Cowan University • University of Western Australia



Jane Colin, Software Test Engineer

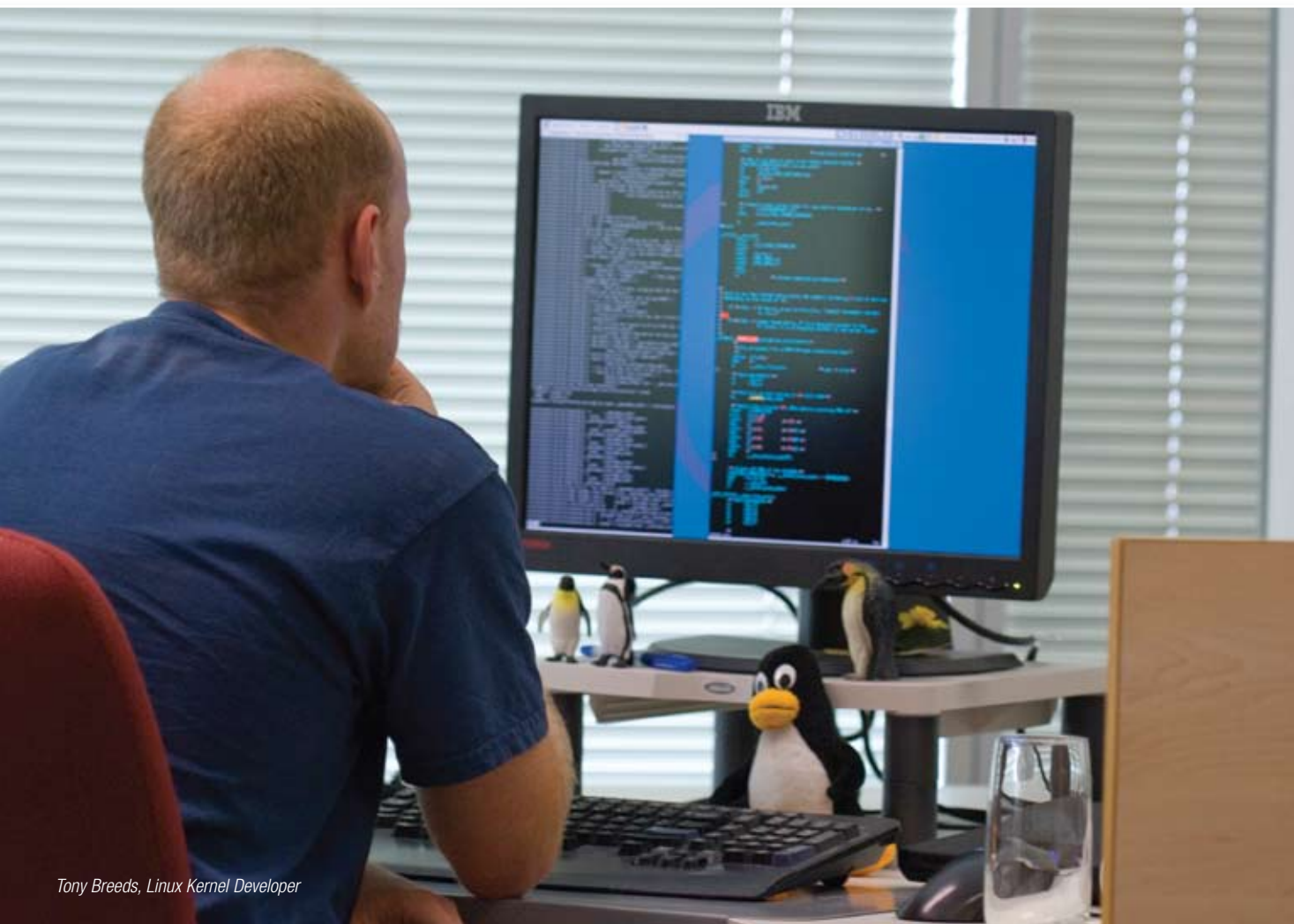
Local support – global reach

ADL staff are actively engaged with clients both locally and globally. By closely engaging with clients, ADL development, support and product management teams are able to obtain valuable commentaries and feedback – enabling the creation of customer use-cases for enhancements to IBM's software products.

ADL staff also regularly present in their domains of expertise to technical communities both internal and external to IBM, at national and international level. The ADL Canberra team – a member of IBM's global Linux Technology Centre (LTC) – contributes to and collaborates

on a range of Open Source projects. Team members also present papers at the top international Linux symposiums. The ADL System z specialists based in Perth, Western Australia, regularly present at SHARE – one of the major worldwide IBM user groups.

In addition, every ADL team is actively engaged with IBM's local and global clients in product briefings, design discussions and product deployment. As the ADL maintains strong relationships with IBM's clients, the needs and requirements of these clients are reflected in the products that the ADL produces for the global market.



Tony Breeds, Linux Kernel Developer



ADL development skills	
Programming skills	<ul style="list-style-type: none"> • APL • Assembler • C / C++ • Cobol • Eclipse • EGL • Fortran • Java • J2EE • PL/X • REXX
Systems skills	<ul style="list-style-type: none"> • AIX • AS400 • DB2 • Domino • HP/UX • IMS • Linux • Lotus Notes • OS/390 • Solaris • Unix • VM, VSE • WebSphere Portal • Windows • z/Linux • z/OS

Glenn Wightwick, IBM Distinguished Engineer & IBM ADL Director

Innovative design, implementation, training and consulting services

The ADL Lab Services team provides extensive technical consulting skills to clients in Australia and New Zealand, across Asia-Pacific and around the world. The Lab Services team comprises software engineers, product specialists, architects and consultants with deep expertise in the most effective application of IBM's software products to solve business problems.

The ADL Lab Services team maintains up-to-date knowledge of the IBM software product portfolio. Team members tap into expertise within the ADL development community or connect with experts within IBM's worldwide network of software labs and research facilities.

Using proven methodologies and drawing from best practices developed through actual engagements, ADL Lab Services helps clients to:

- Accelerate the benefits of IBM software-based solutions by helping to deploy solutions quickly and at lower risk;
- Reduce ongoing costs and improve management and availability through operational excellence; and
- Maximise return on IT investment by closely aligning technology with critical business needs.

Consultancy Services

ADL Lab Services has a team of highly skilled consultants with broad architectural knowledge, deep technical skills, quality project management experience and best practices expertise. These consultants help clients to integrate IBM software solutions into local technical and organisational environments, maximising the value of their IT investment.

Premium Support Programs

ADL Lab Services specialists can also deliver a Premium Support offering addressing the software infrastructure lifecycle – from planning, through deployment, growth and optimisation to managing upgrades and change.



LAB LOCATIONS: Canberra, Sydney, Melbourne, Perth, Brisbane and Gold Coast	
Operating Since (in IBM Australia)	2000
People	> 140
Expertise	<ul style="list-style-type: none"> • Business Requirement Definition • Technical Assessment • Proof of Concept • Solution Architecture Definition • System Design and Functional Requirements Definition • Business Integration Pilot • Business Integration Deployment • Health Check • Performance Tuning • Quality Assurance • Upgrades and Development Requests
Products & Services	<ul style="list-style-type: none"> • Information Management software • Lotus software • Rational software • Tivoli software • WebSphere software

Chris Farrow, ADL Lab Services & Business Development Executive



David Fyfe, Intern | Scott Andrews, Software Engineer | Brent Crosling, Associate IT Specialist | Ivy Chiu, Software Engineer

An international team

delivering end-to-end web content management

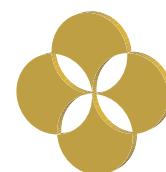
Customers are adopting web content management software for use in their internet, intranet, extranet, portal, blog and wiki sites. Since 2003, an ADL team – located in Sydney, New South Wales – has been leading the international development of the IBM Lotus Web Content Manager (WCM) product. During this time, WCM has seen its customer base grow from just two to more than 1500.

WCM is a key component of WebSphere Portal. It allows non-technical staff to create and manage intranet or internet content, accelerating internal business practices and saving both time and money. WCM helps businesses achieve growth and success through team collaboration, and provides a methodology for building and maintaining websites.

WCM also underpins Lotus Quickr™, a Web 2.0 collaboration platform for end-users that provides wiki, blog and document management functionality.

Contributing architecture, design, development, test and project management expertise to the WCM product, the ADL Sydney team also provides leadership to teams in Raleigh, North Carolina; Westford, Massachusetts; and Boeblingen, Germany. The team also provides lab-based services to customers requesting advanced product capabilities.

Sydney



Matt Ponsford, Software Engineer



LAB LOCATION:	Sydney
Operating Since (in IBM Australia)	2003
People	> 65
Expertise	<ul style="list-style-type: none"> Web content management Distributed computing Enterprise networking Web application servers Virtual worlds
Products & Services	<ul style="list-style-type: none"> Lotus Web Content Manager (part of WebSphere Portal & Lotus Quickr) Level 3 Support Services Lab Services

Left to right: Vatsla Nagpaul, Software Engineer
Tommy Tran, Software Engineer
Prescilla Prescilla, Software Engineer
Chris Berry, Trainee Software Engineer
Trung Khuu, Software Engineer
Gauri Pradhan, Trainee Software Engineer

System z specialists

developing enterprise system software

For over 17 years, the ADL software engineers based in West Perth, Western Australia have been providing development and Level 3 support for enterprise system software products.

Possessing deep technical expertise, these System z software specialists contribute to the development and support of enterprise products across IBM's software range – products that enhance the value of IBM's enterprise System z platform and extend its capability via Service Oriented Architecture (SOA) and web technology. For example, the ADL West Perth team is responsible for the product development tools Fault Analyzer and File Manager, and the development and library management tools ISPF and SCLM. Marrying newer technologies

like Java and the Eclipse environment with System z technology, the team has created web front ends for these products: for example, the SCLM Developer Toolkit and RADz for Fault Analyzer.

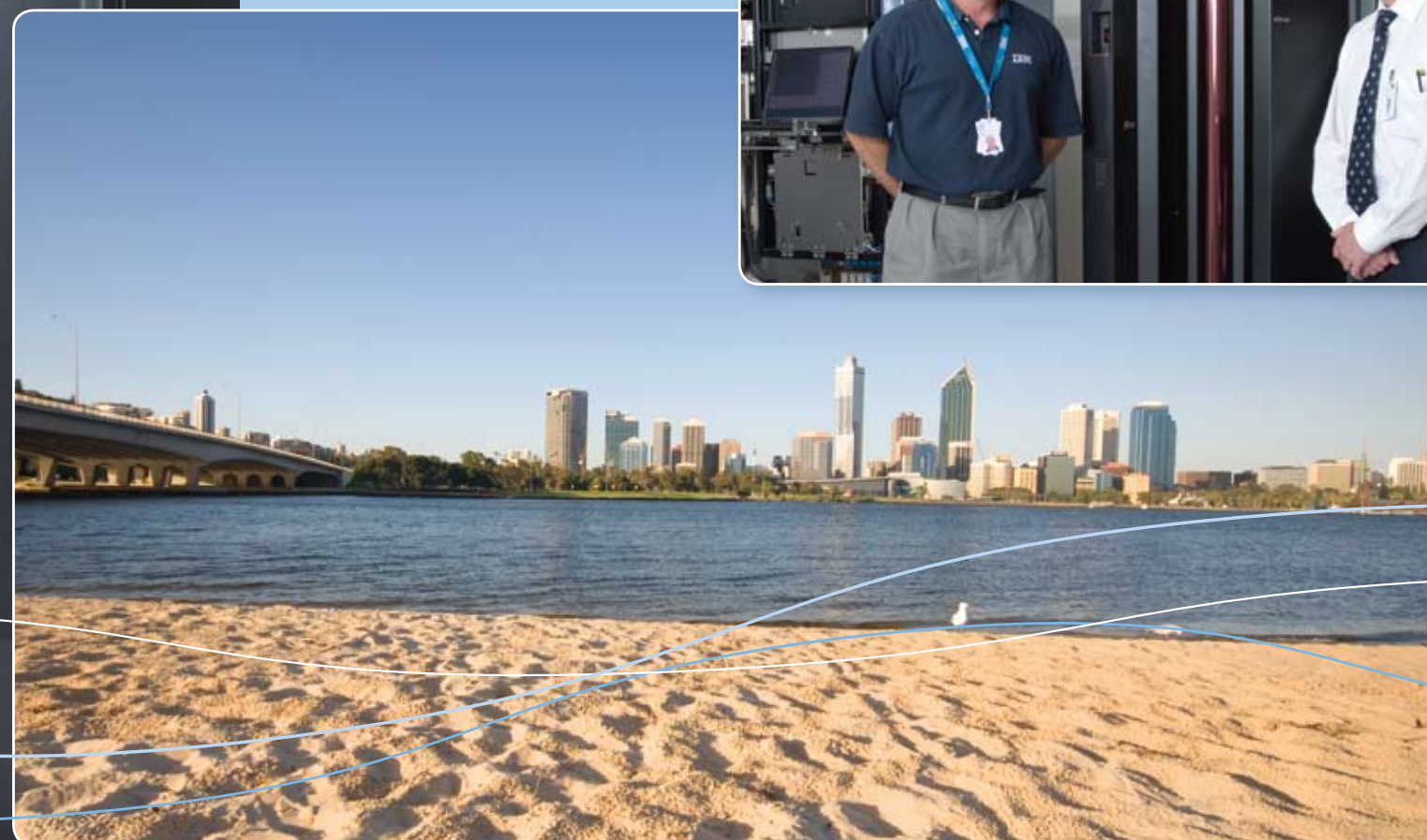
The ADL West Perth team is also responsible for developing products that enhance the effective management of complex enterprise systems, such as z/OS Data Library Adaptor, Tivoli Decision Support (TDSz) and System Automation. Their work extends into language compilers such as COBOL, PL/I and High Level Assembler – and into various subsystems, including cryptography and enhanced security for the z/OS operating system.

Sean O'Brien, Business Area Manager
Rod Turner, Senior Software Engineer



LAB LOCATION:	Perth
Operating Since (in IBM Australia)	1986
People	> 130
Expertise	<ul style="list-style-type: none"> • Configuration and library management • Sysplex management • Security and cryptography • Application development tools • Languages, compilers and run-times • System z operating systems • Availability and business service management • Provisioning and optimisation
Products & Services	<ul style="list-style-type: none"> • Fault Analyzer for System z • File Manager for System z • Geneva ERS • High Level Assembler for MVS, VM and VSE • ISPF • MQ Series for VSE/ESA • COBOL & PL/I Packaging • FORTRAN and APL Support • Systems Automation for z/OS • Business Systems Manager • SCLM & SCLM Developer Toolkit • Visual Age Generator • z/OS • z/VM

Greg Ciurkot, Desktop Support Specialist



Perth



Leading IBM's contribution to the global Linux and Open Source development community

The ADL is home to the highly skilled, Canberra-based Linux and Open Source development team whose technical skills are recognised throughout the international Linux and Open Source community. The team is a part of IBM's global Linux Technology Centre (LTC) and, as such, is Australia's leading Open Source development team.

The LTC serves as a centre of technical competency for Linux and Open Source both within IBM and externally. The LTC also works with the major Linux distributors to provide world class Linux enablement for IBM's servers. ADL Canberra team members contribute to and collaborate with a variety of Open Source projects - and regularly present papers at the top international Linux symposiums.

As well as having a large influence on Linux kernel development, the ADL Canberra team also collaborates with the hardware engineers designing IBM's new

servers. For example, the team was at the centre of Linux enablement for IBM's record-breaking POWER6-based server range and the Cell microprocessor technology, jointly developed by IBM, Sony and Toshiba.

The ADL Canberra team has also been central to the development and release of the IBM Software Development Kit (SDK) for Multicore Acceleration that provides an advanced programming environment for Cell developers. This SDK allows developers to take advantage of the unique features of the Cell microprocessor found in the IBM BladeCenter® QS22 and the Sony PlayStation 3.

Members of the ADL Canberra team are also involved in the exploitation of 3-D virtual world technology including Active Worlds and Second Life, and the development of Scale out File Services to deliver petabyte sized network file storage capability for use in the pharmaceutical, communications and digital media industries.



Benjamin Herrenschmidt, Linux Kernel Hacker



Michael Neuling, Open Source
& Hardware Developer



LAB LOCATION:	Canberra
Operating Since (in IBM Australia)	2001
People	> 20
Expertise	<ul style="list-style-type: none"> • ALRT (Advanced Linux Response Team) • System/hardware level skills in POWER & Cell microprocessor technology • Linux-based hardware bring-up • Linux kernel & subsystems • Linux firewalls • Linux containers • Linux for POWER • Linux for Cell • GNU C compiler • GNU debugger • PPP • Open Source virtualisation (lguest, KVM, Xen) • Samba and Scale-out File Services • Open Source development and community support • Virtual worlds (Second Life development)

Michael Ellerman, Linux Kernel Developer



A centre of excellence for IBM Tivoli Security

Since 1999, the ADL team located on the Gold Coast of Queensland has been an IBM centre of excellence for Tivoli Security products. During this time, its role has expanded to include responsibility for the development of key products in IBM's security portfolio, including Tivoli Identity Manager and Tivoli Federated Identity Manager.

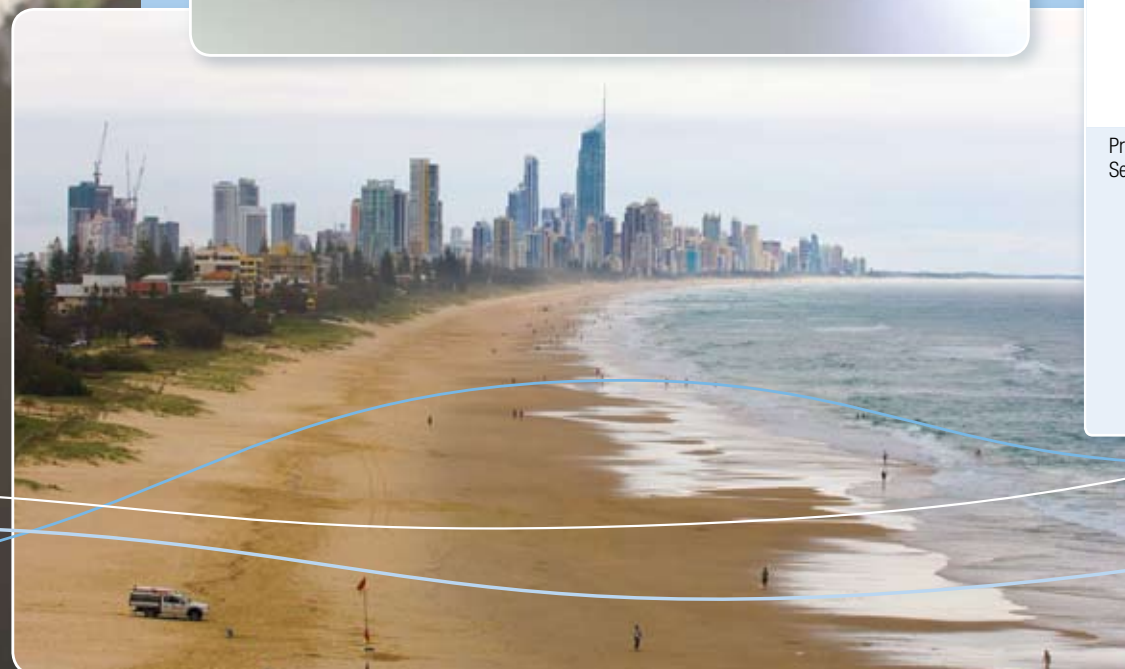
The ADL's world-class security expertise has also been applied to the development of components used by other IBM software products; for example, the General Security Toolkit (GSKit), IBM Crypto for C (ICC), and the Integration Factory. The Integration Factory has provided over 600 adaptors for the whole of the IBM Tivoli Security portfolio.



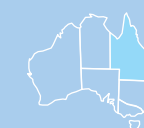
Chris Hockings, Software Engineer
Grant Murphy, Software Engineer



LAB LOCATION:	Gold Coast
Operating Since (in IBM Australia)	1999
People	> 70
Expertise	<ul style="list-style-type: none"> • Authentication and authorisation • Web security management • Identity management • Service Oriented Architecture (SOA) • Cryptography • Distributed computing • Enterprise networking • Web application servers • UNIX operating system internals
Products & Services	<ul style="list-style-type: none"> • Tivoli Access Manager for e-business • Tivoli Access Manager for Operating Systems • Tivoli Identity Manager • Tivoli Federated Identity Manager • IBM Global Security Toolkit component • IBM Crypto for C component • IBM Common Authorisation component



Gold Coast



Simon Canning, Software Engineer

Jenny Wong, Intern



A global technology and development centre for core IBM Tivoli products

IBM Tivoli products are of fundamental importance to many of IBM's Australian and international clients. The ADL Tivoli development team based in Perth, Western Australia applies its expertise to the Tivoli Monitoring suite of software and to the Tivoli Composite Monitoring Application Management (ITCAM) suite. The team's involvement begins with initial product concept and market positioning and continues through to architecture, design, implementation, test, documentation and final delivery for worldwide product launch.

In addition, the team has expanded its charter to include network performance management solutions in the form of large scale enterprise reporting and workload and performance analytics.

There are more than 800 companies around the world using the products developed by the ADL Tivoli development team, and they include the world's largest financial, health care, government, service provider and manufacturing organisations.



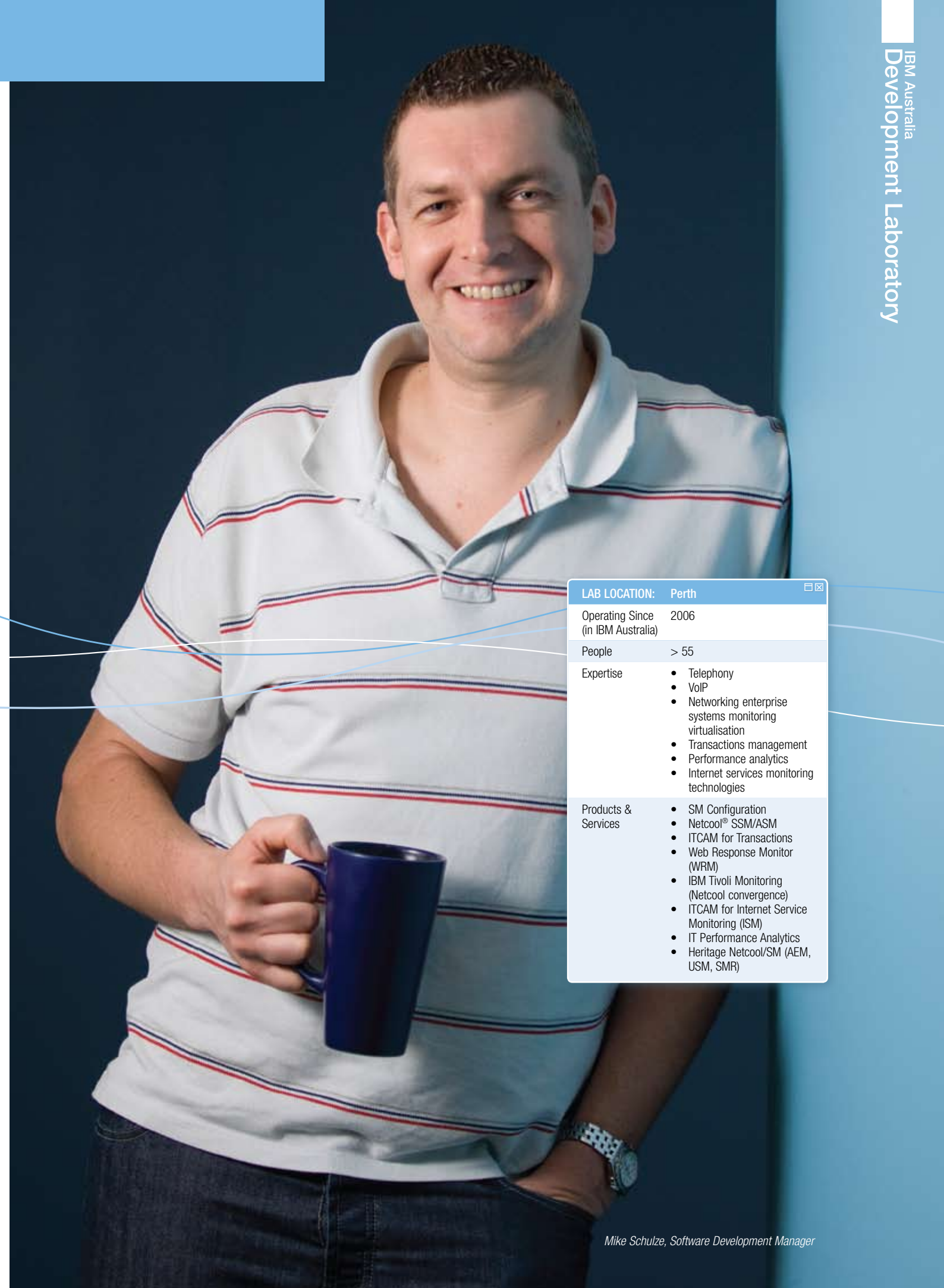
Perth



Joshua Leeman, Advisory Information Developer

Donny Dinh, Software Engineer

Sandra Trang, Development Manager



LAB LOCATION:	Perth
Operating Since (in IBM Australia)	2006
People	> 55
Expertise	<ul style="list-style-type: none"> • Telephony • VoIP • Networking enterprise systems monitoring virtualisation • Transactions management • Performance analytics • Internet services monitoring technologies
Products & Services	<ul style="list-style-type: none"> • SM Configuration • Netcool® SSM/ASM • ITCAM for Transactions • Web Response Monitor (WRM) • IBM Tivoli Monitoring (Netcool convergence) • ITCAM for Internet Service Monitoring (ISM) • IT Performance Analytics • Heritage Netcool/SM (AEM, USM, SMR)

Mike Schulze, Software Development Manager

Providing software support to IBM's clients across Asia-Pacific – and around the world

The ADL Asia Pacific (AP) Support team delivers in-depth technical assistance to IBM clients and business partners – across Asia Pacific and worldwide. The team provides advanced technical support for a wide range of IBM products, enabling clients to extract the full value of their investment in IBM software, hardware and solutions.

Team members use their deep technical knowledge and proven problem solving skills to tackle complex and critical support issues. Their work supplements the activities of the various local IBM Support teams – enabling IBM to offer its clients a responsive, highly experienced, integrated worldwide support team.

The ADL AP Support team is of strategic importance to IBM's global support network owing to the quality and skills of its staff, its language capabilities and its location within a time zone between the Americas and Europe.

A key skills and knowledge base for IBM, the ADL AP Support team offers real-time problem resolution for IBM's Asia Pacific clients. Possessing local language expertise, team members are able to dramatically reduce problem resolution time for clients' mission critical systems. Incorporating the IBM AP Rational Support Centre, the ADL AP Support team contains all the necessary technical, problem solving and language skills to support English, Chinese, Japanese and Korean speaking clients.

The ADL AP Support team is also home to Tivoli's Global Response Team (GRT), incorporating a number of Level 2 Support teams providing in-depth product support for: IP&S (Ascential®), U2 (Universe & Unidata®) and Maximo®. In addition, the team supports IBM's Information Management product set with 'follow-the-sun' systems experts who provide the Asia Pacific element of the 24/7 worldwide virtual team.

LAB LOCATIONS: Sydney, Canberra and Perth	
Operating Since (in IBM Australia)	2002
People	> 150
Expertise	<ul style="list-style-type: none"> • Global Response Team (GRT) for Tivoli and WebSphere products • Level 1, Level 2 and Advanced Support for Information Management, Rational and Lotus products • Field Technical Support for Information Management • Kepner-Tregoe problem solving methodology
Products & Services	<ul style="list-style-type: none"> • DB2 Universal Database • Ascential (IP&S products) • Micromuse (Netcool) • U2 products (UniVerse and Unidata) • Informix • MRO (Maximo) • FileNet • Rational • WCM • Lotus

Evelin Sutopo, Advanced Software Support Engineer

Sydney, Canberra & Perth



For more information about the IBM
Australia Development Laboratory,
contact: adl@au.ibm.com



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IBM Australia Limited
ABN 79 000 024 733
601 Pacific Highway
St Leonards NSW 2065

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Designed by the IBM Grafxlab.
GL_8952

Information Management software

Lotus software

WebSphere software

Tivoli software

Rational software