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word version
pdf version
online version

Identity and Cloud Specialist

Extensive Design, Development and Management Experience

Highly qualified Strategist, Senior Architect and Program Manager with 15 years commercial experience in the enterprise identity, security and cloud computing fields. Has successfully designed, implemented and delivered numerous complex projects including Identity Transformation and Cloud Enablement, and managed teams in both small and large organisations.

Combines a deep understanding of the technical foundations of Identity and Security with the stakeholder communication skills required for project success.

Regular speaker at conferences and trade shows. Originally from a strong research background with a BSc(Hons), a BEng(Hons), a PhD, and a number of academic prizes. Has good spoken communication skills, whether presenting to operations staff or the board of directors, and good written skills, from detailed technical architecture through to strategic roadmaps or corporate communications.

Key technical expertise with Architecture (ITIL, TOGAF etc.), Identity (Open source, NetIQ and CA products), Security (PKI, SSL, SPML...), Directory (LDAP, X500, JNDI...) and Web Services (XML, UDDI, SAML, XKMS ...).

Note for Non-Australian recruiters:

Australian Citizen with U.K. Residency. **Does not have a U.S. Green Card**, and while travel and remote work are welcome, for family reasons is **not interested in permanent work in the US.**

General and Technical Skills

Summary

Experienced IT professional with current online strategy, architecture, design, coding, project management and business case development experience.

Skilled in **Identity and Access Management (IAM), Security, Cloud technology, Web Services, Scientific Programming and Directory Technology and Software Development.**

Accomplished speaker and communicator, with experience presenting and advising C-level staff and creating, driving and implementing organisational strategy and change.

Comfortable in both enterprise and start up environments, with experience in a range of SDLCs including Traditional and Agile. Personal and managerial experience of all the aspects that make a program outstanding from strategy and business case through requirements gathering, technical design, implementation review, testing and deployment, training materials, visual aids, marketing, i18n, packaging, executive presentations, performance testing and so on.

Technical leader familiar with creating and driving technical change and innovation. Author of numerous patents, technical and academic papers, and a number of software products.

Specialist Areas:

Identity (10), Cloud Computing (10), Security (9), Scientific Simulation (9)

Technical Skills - Software

Familiar with many other java based technologies and many standard tools, especially the open source family: Apache, Axis, Tomcat, junit, cvs, svn, ant, maven, log4j, etc. Here is a summary of searchable keywords with a rough competency rating from 1-10:

LDAP(10)	HTML (9)	XML (9)	DSML(9)	JNDI (9)		
SSL (8)	PKI (8)	X500 (8)	JDBC (8)	JavaScript (8)	CSS (8)	SPML(8)
OpenID(7)	SAML (7)	XACML (7)	OAuth (7)	SVN(7)	Velocity (7)	PHP(7)

Languages:

 Familiar with Java, javascript, Perl, PHP, Pascal, Basic, Fortran, Objective C, C++, etc.

Operating Systems

Mac OSX (8)   Windows (7)   Solaris (7)   Linux (7)

Platforms

AWS (8) Heroku (6)

Management and Project Skills

Architect (10) Strategist (10)
Presenter (9)   Internal and Pre-Sales (9) Manager (9)
Developer (8) Documentation Writer (8)   Mentor (8)   Trainer and Educator (8)

Qualifications:

ITIL, PhD, BSc(hons) (Computer Science), BEng(hons) (Electrical Engineering), CISSP

Employment History

Principle Consultant

Australian Cloud Identity (ACI): March 2013 – present

Responsible for guiding strategy and design for our customers, focussing on enabling reliable cloud service deployments for large, heterogeneous organisations.

Chris's role is to give customers a clear view of the benefits of identity managment, a pragmatic roadmap, and the designs to execute on the technical work required to integrate with cloud services. Consulting work has included platforming OpenLDAP and OpenAM on Amazon AWS EC2, and use of AWS datasources such as Amazon RDS.

ACI develops and supports the open source 'JXplorer' LDAP browser, (over 2 million downloads). Recently ACI released a commercial version called 'JXWorkBench' (http://jxworkbench.com), with the first site licence sold to NASA.

Digital Strategy: Identity Services

Australia Post: September 2013 - Present

Developed online strategy for Australia Post, including strategic overview of Post's onine direction, business case and pricing models, service definitions and sales collateral.

Consulted widely across the business from C-level to implementation engineers, and worked with Sales teams to present the Australia Post roadmap to senior government stakeholders.

Worked across multiple business units to put together a successful proof of concept with the Victorian Government to demonstrate Australia Post's 'Verified Identity' cloud service, and initiated the 'Verified Forms' project with commercial partners and the Victorian Government.

ARCHITECT: Identity / Security

Victorian Government (CenITex): July 2009 – Feb 2013

Domain Architect for Identity transformation program. Refactored and integrated the Victorian State Government identity stack in a 4 year, $14m program of work, creating a whole of government 'internal cloud' directory, a common user provisioning and workflow platform, and implementing multi-factor security, web access security, mobile device enablement and cloud security.

The project spanned 10 departments, including the departments of Treasury and Finance, and of Premier and Cabinet.

This work saved millions of dollars by streamlining and decommissioning legacy environments, and enabled cloud services to be seamlessly and securely integrated into the staff working environment, even raising the security posture of otherwiseless insecure cloud services.

Chris was the lead architect, responsible for overall strategy, roadmap, design, much of the detailed technical work, business briefs, legal, privacy and compliance analysis, policy development and, on occasion, program management. In addition he chaired the CenITex Technical Architecture Board, ran regular training seminars, and assisted with service definition and pre-sales exercises.

The program was completed with all major objectives achieved in 2013.

(ITIL, JNDI, LDAP, NetIQ eDirectory, MS AD, Citrix, Desktop SSO, ISO 27001/2, ISM / PSPF).
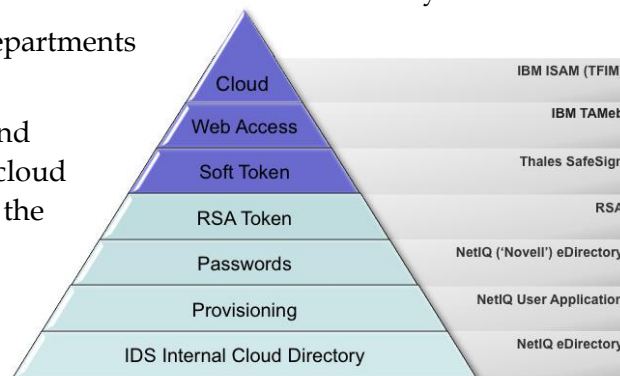
ARCHITECT: Identity / Enterprise

Sensis: October 2006 - March 2009

Architect for Identity Management, Shared Services, Security, CMS, Transaction

Technical leadership of the Sensis-wide Shared Services and Services Oriented Architecture Project.

Originally employed as architect and technical lead on Sensis Identity project, implementing the Sun Identity Stack (Directory, Access Manager, Identity Manager) as a Web Access Control Solution, including Cross-Domain Single Sign-On (CDSSO). Designed and trialled OpenID and Identity web service (SPML) solutions, and helped maintain existing CA Siteminder installation.

Later projects include SOA infrastructure with BEA(Oracle) Aqualogic, Facebook integration, installing and administering Atlassian Confluence (which grew to 1,500+ users), and various commercially confidential projects, ending with a role as Sensis Content Architect and technical liaison between Sensis, Telstra and Big Pond.

Highlights:

> Architecture and implementation of Sensis Identity Solution.
> Technical and Code review of existing White and Yellow Pages search and content engines
> Successful Establishment of 1,500+ user Sensis-wide wiki
> Senior technical advisor for Sensis SOA implementation & repository.
> Co-developed a number of business cases.
> Permanent member of both Sensis and Telstra Design Authorities

(JNDI, LDAP, Tomcat, Servlets, CSS, Ruby on Rails, OpenID, Enterprise 2.0, CMS, SOA, FAST)

BioInformatics Research Scientist

Monash University February 2006 - September 2006

Working on bioinformatics systems with the Monash Department of Biochemistry and Molecular Biology Protein Folding Group. Lead for global protein folding database.
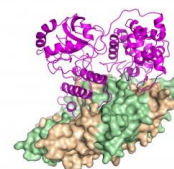
(PHP, MYSQL RDBMS, R STATISTICS, NUMERICAL PROGRAMMING)

Identity Consultant

Pegacat Software - Occasional Consulting: 1999 - 2012

Architecture and consulting work on a variety of smaller LDAP/Identity / J2EE projects in the Identity, Security and Social Networking Spaces. (Pegacat began trading as 'Australian Cloud Identity' in 2012).

> Active Directory to Cloud software connector for major US Cloud firm.
> Subcontractor for Indian Space Agency Directory Project
> Identity Integration consultant for Maplesoft Educational Software
> Secure X-Ray Imaging Pilot for Alfred Hospital
> Mapping Applet for PelicanCorp 'Dial before you Dig' project
> Secure Social Networking Site based on LDAP Directory - 'netmynd.com' project
> Built and maintained JXplorer LDAP open source client (2 million+ downloads)

(JNDI, LDAP, Velocity, Tomcat, DICOM, CSS, PHP, OpenID, REST, SSL, LDAPS, ASN1, X509).

Architect, PM & Developer

Computer Associates: March 1999 – May 2005

ARCHITECT: Web Services Security/ Transaction Minder (2004 - 2005)

PROJECT MANAGER: Web Services Infrastructure (2002 - 2003)

PROJECT MANAGER: eTrust PKI / OCSPro (2001 - 2002)

ARCHITECT/DEVELOPER: Java Directory Projects (1999 - 2001)

Initially recruited as a senior java developer/designer working on a variety of eTrust Directory projects. Moved to manage a pair of security products (eTrust PKI and eTrust OCSPro), both of which were delivered on schedule in 2002. Moved again to take over the early web services infrastructure projects and start-up web services security within CA. Final project was managing incremental releases of CA TransactionMinder (Web Security Siteminder module).

Technical focus was on Java, and related tools such as junit, log4j, tomcat, axis, and various XML toolkits (Apache, Sun's JWSDP etc.). Heavy exposure to Directory technology (X500, LDAP, JNDI), Security technology (PKI, public/private key crypto, SSL, GSSAPI, Kerberos) and web services (JWSDP, XML, XACML, XKMS, UDDI, DSML, SAML, SPML, WTFML).

Highlights

- Manager and Technical Lead of Siteminder web services security module.

- Lead Architect and Project Manager for the eTrust Web Services Security project.

- Managed and co-developed a UDDI server (v1, v2 & v3), a DSML server, a SAML//XACML server, and toolkits for working with SPML, SAML and XKMS.

- Managed a twelve person security team developing Public Key Infrastructure product (eTrust PKI) - version 2.0 delivered on schedule in 2002.

- Managed maintenance release of Online Certificate Status Protocol server (eTrust OCSPro) and first cut of eTrust ETPKI, a general purpose cryptography library.

- Steered Computer Associates first open source product to release (the JXplorer LDAP client: http://jxplorer.org), and led the open source team maintaining it on Sourceforge.

- Numerous side projects involving web services, directories and security, including marketing collateral, tender documents, client presentations, conference presentations, etc.

- Introduced unit testing and automated system testing, applying junit to above projects, and ran seminars on refactoring, java performance and other technical topics.

- Introduced internationalisation (i18n) toolkits and methodologies.

Lead Developer

Imaging Technologies / Zoom Systems: 1998 - 1999

Technical lead on internet managed product kiosk: Zoom Systems. Work involved heavy Java networking and GUI development (Java, JDBC, Swing, RMI, HTML), as well as creating and being DBA for an Oracle database (SQL, Oracle).

Lead Developer

LookSmart: 1996 - 1997

Design and implementation of an innovative pre-Google Web Search Engine. Written client side in Java (v1.01!) and JavaScript, with a custom server in C, C++.

Design was leading edge, and exposed many of the difficulties of using early java and (especially) JavaScript to support delivery to multiple platforms, but produced an impressive product that, once downloaded, operated an order of magnitude faster than equivalent web search engines.

LookSmart peaked at a market cap of $5B, and was a trailblazer in the internet search space.

Lead Developer

VIPAC Engineers and Scientists: 1995 (5 month contract)

Design and implementation of a test system for a vehicular controller/telemetry unit for Melbourne Trams, using C++. The project was designed and co-written with a single associate (Zik Saleeba). It involved writing a Turing-complete test language, some hardware work, and complete user, program and technical documentation. The project was finished ahead of schedule.

Designer/Developer

Leigh Mardon Datacard: 1994 (4 month contract)

C, C++ programming for an on-the-spot licence system, interfacing with the RTA's Drives System. The product photographed the licensee, took their details and produced the final drivers licence. This product now used by the South Australian RTA, and similar systems are in use across Australia. Developed UI, graphics and documentation, as well as code for hardware I/O and utilities.

Research Fellow

Monash University: 1994 (4 months)

Research Fellow working on statistical analysis and report preparation using SPSS / Quattro Pro.

Research Fellow

Monash University: 1992 - 1993 (6 months)

Research Assistant working on preparation, analysis and reporting of survey data using SPSS.

Designer/Developer

Microcraft Pty Ltd : 1991 - 1993

General programming for the Microcraft "AUTHOR" Computer Based Training (CBT) and Computer Managed Learning (CML) project. Wrote a windowed, networked database student management program using several versions of BASIC and Visual Basic, using Microsoft Programmer's Workbench, DBASE, FOXBASE and Delphi.

Work involved development of a content management system (CMS) writing database utilities, graphic design, graphics utilities and windowing utilities, including low level mouse handling, button/ edit field creation etc., in DOS BASIC. Essentially the project was writing a "Visual Basic" equivalent in the days before Visual Basic was available, aimed at educators.

In 1993 designed and managed a complex report writing utility. Four person team finished early.

Developer

Moldflow: 1990 (2 months)

Wrote a Primos print file to word perfect conversion utility.

Research Assistant

Melbourne Weather Bureau. 1988 (3 month internship)

Wrote historical weather data conversion/numerical programs using FORTRAN and JCL.

Short Term/Casual:

- Monash University 1989 - 1995: Tutor/ Mentor, Dept. Computer Science & Engineering.
- Monash University 1992: Visual Basic/ SQL Software Developer.
- M-Dec Cabling Pty. Ltd. 1992: Turbo-Pascal Programmer and Systems Administrator.
- Equinet 1989: Emergency/Weekend Mainframe Operator for financial services company.
- Ren-Master 1989: XENIX Software Maintenance for medical services firm.
- Glen Waverley High School 1983: Educational Software in Basic

Academic Qualifications:

Initially completed a five year double degree in science and engineering. Returned a couple of years later to do an honours year in computer science and then a PhD (completed part time while employed).

Qualifications

- 2000: PhD Computer Science (with a bioinformatics component)

  Thesis topic: "Nanosimulation of the Cytoskeleton"

- 1993: BSc.(Hons, 1st class) Computer Science

  Thesis topic: Real-Time Simulation of Special Relativity"

- 1992: Graduate Diploma, Asian Studies

- 1990: B.Eng.(Hons) Electrical Engineering

  Thesis topic: "Catastrophic Superconductor Breakdown"

- 1988: BSc. Maths/Physics

Distinctions:

- Computer Science Honours Thesis, rated best of the year 1993
- Graduated 2nd in class, Monash Dept. Computer Science 1993
- Control Data Corporation Prize for Best Computer Engineering Student (1989)
- Electrical Engineering Honours Thesis rated in top three, submitted for IEEE world prize.
- Various school prizes.

Academic History

PhD Thesis and related work 1994 - 1998

Written in C++, under IRIX 5.3 on an SGI Indigo2 graphics workstation. The Thesis involved simulating the 'self assembling' behaviour of very small particles, concentrating on a related group of plant cell protein structures (actin filaments, microtubules, plasmodesmata and viral proteins).

The work involved writing 3D model viewers, image processing modules, modelling and scripting languages, and protein assembly simulators, as well as various numerical routines, class libraries for fast graphics, fast vector mathematics and fast 3D modelling.

This work has been presented at a number of international and local scientific conferences, and involved public speaking and a great deal of writing. The full Thesis is published on the web, and is on line at the 'Nanosimulation of the Cytoskeleton' web page.
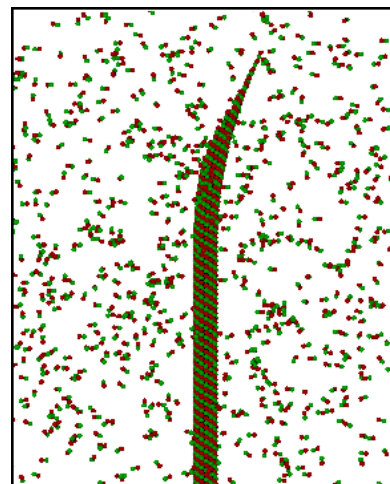
Figure 10.44: Orthographic view with free dimers

Honours Thesis 1993

A real-time relativity simulator written in C++ which was three orders of magnitude (1000 times) faster than the fastest previous simulator (published in the Journal of Visualisation and Computer Animation).

The work foreshadowed some aspects of the recent game from MIT "A Slower Speed of Light", released in 2012 almost twenty years later, with graphics hardware thousands of times faster than that available in 1993!
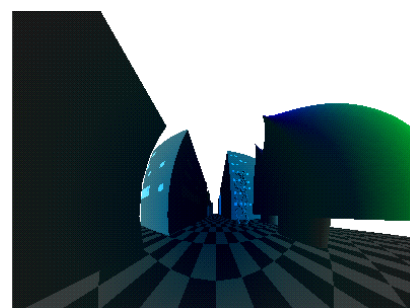
Articles and Conference Presentations

Presented at various International Academic and Industry Conferences, including RSA Show, Asia Pacific PKI Forum, CA World and CA Expo. A partial list of conference presentations, academic articles and technical notes is available on request.

Patents

Software patents are a regrettable cost of doing business in the U.S. In order to defend against unscrupulous litigators, it is a requirement in leading edge R&D to file patents that document a project's progress.

The following 23 patents have been filed during work with CA.

- Fast Directory Searching using Concatenated String Values of Child Entries
- Automatic XML Validation Handling of Unimplemented Code
- Customer Detail Publication in an Internal UDDI
- Simplified Retrieval and Sorting from a Directory Using Sequential Entry Names
- Automated Patching of Code into XML Schema Derived Java Classes
- Web Service Address and WSDL Translation via an Intermediary
- Efficient Storage of XML in an LDAP or X500 Directory
- Using Casting Errors and Automatically Generated Code to Simplify a Server
- Automatic Validation Handling of Unimplemented XML Code
- UDDI challenge response Security Authentication
- SPML implemented on Directory
- Supporting Multiple Versions of UDDI via Fast-Find Indexing
- A UDDI Proxy for Non-UDDI Aware Applications
- UDDI Proxy for Balancing Load Requests and Fail-Over
- A Method of Storing a Multipart XML Document
- A Layered Architecture for Web Services Firewalls
- A Web Services Firewall as a Hardware Appliance
- A Method for Automated Testing of XML Servers
- Automated Creation of Web GUIs for XML Servers
- Automated Creation of HTTP to XML Translation Servers
- Automated creation of Model and View code from XML Schema
- Cascading Configuration Using Multiple Configuration Trees
- Distributing Software Elements via Cascading Configuration

The following 2 patents have been filed in support of recent Start-up work.

- A System for Re-entrant Collaborative Polling with Notifications (for 'FriendHerder')
- A Hierarchical System for Knowledge Management (for 'NetMynd')

Open Source and Hobby Programming

Involved in a large number of minor recreational projects, in C++, HTML, Java, JavaScript and Perl.

Founder and Lead Developer on the JXplorer Project (http://jxplorer.org). JXplorer is an advanced open source LDAP browser and administrative tool with a large feature list and flexible architecture. Responsible for maintaining the JXplorer web site and the JXplorer sourceforge repository. JXplorer has been very successful, and has steadily increased its downloads since first launching and reached 2 million manual downloads by early 2013, and is bundled with many Linux distributions. It has also been translated into six languages including Chinese.

Also writes code for a non-commercial computer game - 'Voyager', which pre-dates the Star Trek series of the same name, and has been in continuous development for over twenty years. Voyager is a multi-player galactic conquest game written by a group of friends. Wrote the alien race generation GUI and the spiral galaxy star map generator, as well as a pluggable client framework.

Start-up Development

Has lead a number of small commercial start-ups.

http://www.netmynd.com is a java based web 2.0 social networking project based on a hierarchical wiki data model with security, ratings, cascading configuration and an extensible programming model.

FriendHerder is a simple PHP based social organiser, extending the concepts of programs like Google calendar to cover generic agreement or voting on topics of interest (such as "which film will we see tonight?").

Web Sites

Implemented and maintains the following Unicode ancient language web sites:

- Teach Yourself Ancient Greek (http://tyancientgreek.org)
- Teach Yourself Latin (http://tylatin.org)

The work involved heavy use of Unicode and Perl, including automated translation of a proprietary ancient Greek text base into 150+ pages of formatted HTML.

Hobbies

When not coding, or wrestling small children, is a keen reader, writer, roleplayer, pilot, carpenter and clock maker. Has built from scratch a number of complex mechanical clocks of which he is inordinately proud, and a large quantity of wooden bookcases, beds, tables and so on, of more variable quality. Very occasionally manages to find the time to go flying or diving. Also working on the great Australian IT novel (release date and publisher to be announced…)

12

Licences

☐   Australian Driver's Licence

☐   Australian Private Pilot's Licence

☐   Open water SCUBA licence

☐   Australian Passport (U.K. permanent residency)

Salary and Role Expectations

Senior consulting or permanent role.

Referees:

(These **must not** be contacted without first informing me). Other referees available on request.

Mr. Scott Thomson

Industry Strategy Manager APAC

Adobe

(ex. CA eTrust Chief Architect)

Mr Tim Bentley

Project Manager and Architect

Papercut

(ex CA eTrust Web Services)