

# Resume: David Elson

## Primary Skills

### Operating Systems

- Linux, since 1991.
- Other Unix, including Solaris, HP/UX, AIX, IRIX.

### Programming

- Linux and Unix shell scripting
- PHP
- Perl
- SQL, MySQL, Oracle, Informix, ODBC, JDBC
- Pascal, Fortran, others

### Core Technologies

- LDAP – Directory Services including Red Hat, Novell and Microsoft
- Security, Firewalls, Intrusion Detection, Auditing
- Cryptography / encryption techniques
- sendmail, SMTP, DNS/BIND, uucp, TCP/IP
- Apache, IIS, PHP, ASP, web site integration and backend
- XML, HTML, DHTML
- Cisco, Ascend/Lucent, Red Hat, Microsoft

### Other

- Excellent analytical and general problem solving skills.
- Strong documentation skills, ability to document systems from user requirements to end user & technical manuals.
- Strong people and team management skills,
- Experience working in large or small teams, in networks ranging from single server systems to datacenter and world-wide.

## Experience

In summary, I have approximately 20 years Unix and TCP/IP networking experience, including Systems Administration, and Network Management.

I also have extensive management experience, having served in management roles in my last three permanent positions. I have set up and run my own successful small business. I have run a number of successful training courses and have good lecturing and presentation skills.

I have a wide range of Open Systems, Unix, and Networking skills acquired on a number of different platforms I have performed in a range of roles from systems engineering, capacity management, security and firewall installation, and network planning.

As a Linux and Network consultant and administrator, I have worked in installing and maintaining network systems such as Apache, J2EE, Database systems such as Oracle and MySQL, and Linux networks and clusters (including SAN and NAS attached storage systems).

In addition to these activities I have presented papers at the national AUUG (open systems user group) and linux.conf.au conferences on several topics. I have published several papers on Linux and internet related topics, including cable modems and bandwidth management, networking and address management issues, and firewalls and security.

I have extensive internet experience, having been on the internet scene since 1992, and having set up and run an internet service provider. I have expertise in WWW page design, CGI, Perl, PHP and Tk/Tcl web programming, and internet firewall setup and maintenance. I was a founding member of the PHP user's group in Sydney, and I am a maintainer or developer of several Open Source PHP packages currently in use in the PHP/PEAR community.

## Skills Matrix

Linux and Unix systems generally	20 years
Red Hat Linux / CentOS	10 years
Debian Linux	2 years
SuSE Linux	5 years
Solaris	4 years
HP/UX	2 years
Sendmail (including filters, plugins, etc)	5 years
MySQL	8 years
PostgreSQL/slony	2 years
Apache	8 years
Nagios	2 years
CVS	10 years
Subversion	2 years
PHP	8 years
Perl	5 years
Firewalls & Network security	10 years
TCP/IP networking, generally	10 years

## April 2001 - Present

### *Contracting to various organisations*

I have contracted to various organisations as an independent contractor. Major Projects undertaken include:

**University of NSW (6 months):** Installation and commissioning of a large number of Linux servers across a range of virtual machine farms using Vmware. Design and implementation of system build and system management procedures for Red Hat and SUSE Linux including cfengine, Novell Zenworks, cacti, and a range of other tools. Integration with Solaris and Windows Active Directory systems.

**Office of State Revenue (18 months):** Setup and build of an infringement management and processing system. This included setup and build of production, development, and test servers running primarily Red Hat Linux but also CentOS, Ubuntu, and other operating systems. Integration with the existing Novell eDirectory (LDAP) back end. Set up and database management, performance tuning and optimisation of PostgreSQL servers. Liaison with existing systems administration team, documentation and handover of processes and procedures to in-house systems administrators and database administrators, including providing training in PostgreSQL and the database structure behind the system.

**Optus (2 years):** Linux System administration and network management of the internal corporate network. Building a large scale Red Hat Linux network using Red Hat Satellite and in-house developed build systems based on kickstart. Managing 200+ Linux servers as part of a systems team, including training of junior administrators. Systems planning, and consulting with application designers and systems engineers. Version management of systems administration processes using CVS.

**Medemail (5 years):** Systems administration, setup, and development of a large scale health portal. This was based on a mix of Red Hat, Fedora, and prior to that Debian servers, with a PHP web site and a MySQL back end. Implementation of OpenLDAP and Fedora Directory Server, and setting up web based user management systems.

**Security Focus (various times):** I wrote a number of articles and white papers for the Security Focus on line magazine, including reviews and implementation notes on various security products, best practice documents on LDAP implementation and integration, etc. A number of these papers were re-published in various formats, including Novell technotes.

## September 1998 - April 2001

### *Senior Consultant, Wang New Zealand.*

I joined Wang in September of 1998 in their Christchurch office to open their Enterprise Networks division in the South Island. I worked as a consultant in the Security, Systems, and Networking area, and expanded the consulting business in the South Island. I had leadership of the Networks and Security group, based in Christchurch, leading a team of 5 - 8 data networking staff, 3 local networking consultants, and 4 - 6 security consultants.

Platforms: Linux, MS Windows, Solaris, Firewall-1, ISS, VPNs.

## September 1996 - September 1998

Contracting to a number of organisations in Sydney, mostly as a Unix systems administrator. I managed a wide variety of Unix installations including HP-UX, Solaris, SunOS, and Linux. I was also involved in database administration on Oracle. My clients during this period include:

- State Superannuation Authority.
- Tennant Limited.
- Roads and Traffic Authority.

Platforms: Linux, Solaris, HP/UX, Oracle.

## **July 1995 - July 1996**

*Partner/Owner & Business Manager, Matra Internetworks, Rose Bay, NSW.*

I established Matra Internetworks as a part time venture with two partners in July 1995. This involved setting up new unix networks, implementing disaster recovery strategies, setting up firewalls, installing RAID disk systems, and installing and programming both Ascend and Cisco routers.

## **October 1994 - January 1996**

*CSC Australia (formerly CSA), Pacific Highway, St Leonards, NSW.*

At CSC I took on a number of roles, including Configuration Management of a large real time software project, and PC network administration.

I set up and implemented a Windows NT based network for MIS. In addition to this I supported approximately 80 software engineers operating configuration management systems, implementing new systems in a unix environment (SunOS, Solaris, and SGI IRIX), and acting as team leader for a configuration management group of 6 full time staff.

## **May 1989-October 1994**

*Australian Defence Industries, Technology Park, Bentley, WA.*

At ADI I took on a number of roles including from Unix and LAN system administration, software engineering, configuration management, and software team leadership.

I was the team leader of the systems engineering team on both the MIST and EWCAPSS projects.

I also acted as configuration manager and communications security officer for both EWCAPSS and MIST. My position included Configuration Management of the core Ada software library (Kernel Command and Control System) held by ADI.

I lead the computer system and network design team for several recent tenders. This includes the JP2030 (Joint forces HQ command support system), and the Mine Warfare Command Support System (MWCSS). I was software and networking lead engineer for the shore based support facilities' team on the successful Mine Hunter Coastal project.

I was also a mathematical consultant for ADI's Geographical display and database system.

I was also involved as a systems software engineer and unix systems administrator.

Systems software engineer duties involved being part of a team performing analysis, design, and programming command and control systems in Ada, C and Assembler, on the unix operating system.

## **January 1987 - April 1989**

*Analyst/Programmer, Able Computing Services, Centerpoint Tower, 123 Colin Street, West Perth, WA.*

Duties included project development and co-ordination, software library maintenance, development and documentation.

Able installed several unix networks, including systems running Unix system V and BSD on PC and ICL platforms.

## **July 1984 - January 1987**

*Technical Support Programmer, Jupiter Micro Craft, 1 Fitzgerald Street, Perth.*

Programming in DOS and Unix systems, and management of Unix networks running SCO Xenix and SCO system V.

## Qualifications

**BSc in Pure and Applied Mathematics**

University of Western Australia

**Red Hat Certified Engineer (RHCE)**