

Andrew Frederick Cowie

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Capabilities

Management Consultancy

High level perspective grounded in a thorough understanding of information technology. Able to work at levels ranging from boardroom to implementation. Extensive work in project review, change management, and improving operations practises. Ability to work with IT while maintaining focus on business outcomes. Experience facilitating strategic planning.

Solid understanding of organizational dynamics and how to work within processes to achieve goals. Skilled at financial modelling, cost control, and formulation of arguments in business plan form. Considerable experience facilitating the growth of startups and young companies, especially scaling IT systems from initial pilot projects to heavy loaded production platforms.

Experienced business traveller and able to work with clients anywhere worldwide.

Extensive Technology Background

15 plus years in technology, particularly with the Unix and Linux operating systems. Extensive competence in IT operations management, infrastructure architecture, and re-engineering build systems. Long experience in systems administration and associated database management and network design. Remarkable success when troubleshooting, especially enterprise application and e-commerce platforms built around Java.

Considerable software development experience, including end-user programs, dynamic web applications, and systems tool development. Primary expertise is Java on Linux, supported by a background in C, Shell, Perl, and, most recently, Python.

Business Process Improvement

Experienced in change management, process development, and using procedures to execute massive changes and upgrades to mission critical systems. Emphasis on successfully integrating people with processes.

Leadership

Strong leadership ability and management skills. Hallmarks are articulating vision, creative thinking and driving change. Have managed groups 150 strong and have had excellent results guiding the growth and development of staff. Able to make sound decisions in time-critical situations.

Accomplished Communicator

Strong presentation and communication skills. Numerous articles and papers published. Frequent speaker at conferences on topics of operations professionalism, Open Source business and development models, decision making within technology contexts, and culture in the information age.

Bachelor of Engineering in Engineering Physics – Royal Military College
Kingston, 1991-1995

Science, Technology & Business – Shad Valley
Ottawa, summer 1990

Senior Consultant – Operational Dynamics Consulting, Pty Ltd
Sydney, 2003-present

A boutique management consultancy working in the IT operations and software development space focusing on mission critical systems and process improvement.

- Reviewed the design and implementation of the core software platform being developed by a large Australian government agency. Worked with technical teams to identify issues with quality, robustness, and scalability inherent in their code. Advised senior management regarding present challenges, the performance of their staff, and options for future growth.
- Facilitated broad strategic change in a non-profit organization at corporate/board level. Helped identify their raison d'être and future direction.
- Helped an upstart Silicon Valley database company improve their product to be more successful in the Linux and Open Source space. Later advised on enhancing organization structures & refining processes used by their in-house development team.
- Reviewed the build and testing infrastructure used by a prominent Sydney based Java software company. Recommended options for increasing automation of their systems and improving efficiency of their processes.
- Researched drivers of competitive business environments, paperwork burden and cost of compliance issues for a major Canadian government ministry.
- Established an IT governance structure around a client's technology initiative. Supervised tender process and vendor selection. Ensured knowledge transfer from existing projects to the staff developing the new system.
- Introduced a new operations methodology. Through analysis, planning, execution and knowledge capture, have taught clients how to write effective procedures for undertaking changes and upgrades to mission critical systems.

Project Lead & Principal Developer – Java bindings for the GNOME Desktop
Worldwide, 2006-2008

GNOME is used by numerous vendors (including Red Hat Enterprise Linux, Novell's SuSE, Canonical's Ubuntu, Sun's Solaris) in their desktop offerings; java-gnome is a library allowing developers to write rich-client Linux programs in Java.

- Completely re-engineered a large Open Source project. Developed a new approach to the problem space by clarifying the audience and setting objectives for the project accordingly. Redesigned the internal architecture.
- Two years of intense software engineering bringing the design into reality and growing a global community of contributors. The code base now exceeds 60K lines of code; the library is mostly Java and C with supporting utilities in Python and Perl.
- Created a new website to promote the revitalized project. Succeeded in getting the library packaged in several major Linux distros, and traveled frequently presenting the project at technical conferences.

Director of Operations – Upoc, Inc

New York, 2000-2002

A new-media startup doing group chat via text messages. One of the first companies to enable marketing campaigns to reach consumers through their mobile devices. Our production internet platform delivered over 5% of the daily SMS traffic in North America.

- Responsible for all corporate IT including vendor relations, research of available options, cost/benefit analysis and implementation of new technologies. Maintained 24/7 availability of the production site. Monitored system performance and responsiveness, directed troubleshooting and process improvement. Performed crisis management during emergencies, including a successful recovery from the Sept 11 terrorist attacks.
- Project managed deployment of production network and systems, including initial rollout, installation, configuration, and integration testing. Handled multiple instances of hardware refresh, site moves, and deployment of software upgrades. Optimized network designs to ensure availability, efficiency, and security.
- Recruited and managed a large sysadmin team. Supervised all aspects of systems administration in both the production platform (Java on Solaris Unix) and in the corporate office (Unix, Linux and Windows) as well as Oracle databases and Cisco network backbone.
- Developed robust automation to enhance reliability; dramatically improved efficiency of critical infrastructure processes enabling the deployment cycle to run 86% faster.
- Co-ordinated interactions between operations, development, and creative departments to effect release of new versions of the production application. Oversaw day-to-day testing, validation, and deployment of upgrades. Implemented procedures to reduce human error and improve efficiency.

Co-Founder & Technical Architect – ShadNet Online Community

Toronto, 1996-1999

An early web platform intended to foster relations and interaction amongst members of an alumni organization.

- Initiated project. Gained organizational approval to proceed, championed project through a stage-gate evaluation model, and obtained funding. Conducted public relations leading up to initial launch. Kept developers focused, motivated, and on track. To increase resources available, successfully advocated moving the ShadNet code base to a distributed development model under an Open Source license.
- Won approval for use of Linux operating system. Designed the functional interface to the system. Conducted usability trials.
- Authored (in Java and Perl) a front end messaging client for users and the back end session management server for the site, enabling a sense of community.

Infantry Officer – Canadian Military

Canada and Europe, 1991-2000

The Royal Canadian Regiment

- Proven leadership and decision making abilities under conditions of high stress and time pressure. Exercised direct management responsibility over 40 subordinates. Participated in higher echelon planning and problem solving.
- Ran numerous leadership and skills courses for both officer-cadets and recruit soldiers. Developed a new leadership course for senior NCOs at the Infantry School.
- Deployed operationally with NATO SFOR to Bosnia during the Kosovo campaign. Participated in multinational coordination and team building. Commanded soldiers in combined operations.

Systems Administrator – Digital Equipment Corporation

Toronto, summer 1990

A publicly traded multinational corporation noted in its day for their high-end mainframes as well as their innovation in corporate desktops and workstations.

- Introduced new ideas and capabilities into a major computer corporation, assisting their transition from VMS technologies to Unix based ones.

Directorships

Member, Board of Directors – Canadian Centre for Creative Technology

1996-2006

A not-for-profit non-governmental organization determined to promote excellence in youth and to help develop innovative leaders.

- Corporate governance experience, particularly in areas of long-term visioning and strategic planning. Focused on project development, program quality control, and fiscal management.

Secretary, Managing Committee – Linux Australia, Inc

2003-2005

Facilitating the enthusiasms of the Australian Linux community; primary activity is to ensure the smooth running of the world renowned annual technical conference “linux.conf.au”.

- Helping assure continuity, professionalism, and quality. Providing expertise in corporate governance and communications strategy, and have worked to cement alliances with other organizations.

Member, Board of Directors – Australian Unix, Linux, and Open Source Professionals' Organization

2003-2004

An association helping senior professionals involved in systems administration, software development, networking, and databases interact and further their professional development.

- Participating in renewing an organization, defining its goals, and helping to encourage members' volunteer efforts.

Selected Publications

Conference Papers

“What would you do if you lost your office” - Disaster Recovery in Lower Manhattan, September 2001. Lessons small organizations can learn about business continuity.

First presented at *Australian Unix, Linux and Open Source Professionals' Conference* in Sydney, Australia, September 2003. Most recently published in *Proceedings of the Information Security, Audit and Controls Association Oceania Conference*, Melbourne, Australia, October 2004.

Surviving Change. Understanding complexity in the IT world and increasing the professionalism of operations staff to deal with it.

Proceedings of the O'Reilly MySQL Database Users Conference, Santa Clara, USA, April 2005.

Modern trends in Unix and Linux infrastructure management. A survey of current practise, techniques used in large systems, and insight into future directions in the IT industry.

Proceedings of the Systems Administration Conference, Perth, Australia, September 2005. and presented as a featured invited speaker at *Large Installation Systems Administration (LISA) Conference* San Diego, USA, December 2005.

Magazine Articles

New solutions for distributing data.

Database Trends and Applications, March 2007

A report from the frontier where Open Source and Java meet.

"Barbarians at the Gate", *Enterprise Open Source Magazine*, October 2006.

Solving real world package management problems caused by newer versions of software.

"Gentoo for all the Unusual Reasons", *Linux Journal*, issue 130, February 2005.

Extreme Systems Administration.

O'Reilly *OnLamp* online magazine, April 2005.

Presentations

"Tales from the Dark Side of the Moon". What it actually takes to successfully deploy and maintain Open Source software.

Presented at the Linux Bangalore conference, Bangalore, India, December 2004 and at Toronto Linux User's Group, Toronto, Canada, April 2005.

Inside | Outside. How the ability to participate helps end the digital divide.

Keynote speech to the Free and Open Source India conference, Bangalore, India, December 2005.

Massive Changes and Upgrades to Mission Critical Systems. Effective planning and documentation to mitigate risk in managing enterprise IT systems.

A tutorial presented at venues worldwide, most recently at the Large Installation Systems Administration (LISA) conference in San Diego, California, USA, December 2005.

Scaling up. Growing a vibrant community around a technology product.

Originally written as the opening keynote for db4objects, Inc's first annual users' and developers' conference, London, UK, July 2006. Variations on this theme have been used to in other presentations encouraging communities to actively facilitate participation by new contributors.

Writing Really Rad GTK and GNOME Applications in C, Python, or Java. A tutorial in the basics of graphical user interface development on Linux.

Originally written for the Australian Linux Technical Conference (linux.conf.au) Sydney, Australia, January 2007; co-presented with Davyd Madeley. Has formed the basis of numerous talks since. Presented again by popular request at Melbourne, Australia, January 2008.

"But what good is it, really?" Perspectives on how Open Source will affect students' and their role in its future.

Keynote speech at Mukthi 4.07, M S Ramaiah Institute of Technology, Bangalore, India, April 2007.

Looking back up the river. Reflections on the relations between the people in upstream Open Source projects and those packaging software in downstream Linux distributions.

Originally written for the Gentoo Linux UK annual conference, London, UK, July 2007 and since presented at numerous venues.

Opening GTK to Java programmers. The past, present, and future of the java-gnome bindings project.

Presented at the GNOME Users and Developers European Conference (GUADEC) at Birmingham, United Kingdom, July 2007.

Awards

A recipient of the Governor General's Bronze Medal (awarded to the student having the highest scholastic achievement in their high school graduating class) and won the Drill and Exercises prize, Second Year at RMC (awarded to the top officer cadet in his or her class). Earned a distinction on the Officer Professional Development and Field Operations exams. Earned Membership in the Canadian Aeronautics and Space Institute and the Australian Computer Society.

Interests

Scuba diving, trekking, and blue water sailing. Enjoy distance running and study the Japanese martial art Aikido. Read extensively on science, business, and international relations. An avid connoisseur of cappuccino, fine wine, and world class DJs.