

## Experienced Technologist. Trusted Advisor. People Leader.

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Having traversed much of the IT sector, my current placement is as a technical people leader, managing the user experiences provided by the IS Service Desk at Gallagher. I bring a long history of infrastructure management, a deep information security perspective, and a native ability to lead a team. As a technologist, I am entrusted with researching and selecting technology solutions, providing accurate and up-to-date advice, and for ensuring correct operation of the IT portfolio. To achieve this, I work closely with end-users, continually engage in professional development, and maintain close relationships with industry experts.

### My Current Role

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#### IS User Experience Manager – Gallagher Group Limited, Hamilton

September 2018 – Present

Gallagher is a manufacturing company with business units in physical security, animal management, and fuel pumps. With nearly 1000 staff in nine branches worldwide, the Gallagher staff rely on my team of eight (including two in remote offices) to meet their computing needs. Reporting directly to the CIO, my position was newly created as the result of team growth.

##### *Key Achievements:*

- Working to dispel the team's initial reputation of unhelpfulness, I invited proactive and positive communication by building strong relationships with staff from all parts of the company, from the Executive Leadership team to the janitorial staff
- Adopted a languishing and disillusioned Support Desk team, turning it into a flourishing and enthusiastic family
- Took ownership of incorporating ITIL methodologies and terminology within the culture of the Support team
- Replaced our aging in-house ITSM tool with Jira Service Desk, with minimal disruption across 37 Agents and five teams
- Managed the software rollout of Office365 ProPlus on 800 PC's, after identifying the optimal method for our environment
- Worked in the IS Trust committee to break down a culture of low trust and false harmony, and to encourage healthy conflict
- Became an expert in Automation for Jira and created team automations, saving approx 5 hours of ticket admin labour daily
- Led the Support team to achieve some of the highest KPI's in IS, meeting our resolution time targets for 99.7% of all tickets
- Through proactive leadership and encouragement, led the Support team to take ownership of the department's Continuous Improvements targets, resulting in approximately 80% of the department's CI's being initiated within the Support team

### My Previous Roles

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#### Network and Security Administrator – Gallagher Group Limited, Hamilton

July 2016 – September 2018

Having been initially hired as a Senior Systems Administrator at Gallagher Group (May-July), I was quickly promoted to the role of Network and Security Administrator, where I shared joint responsibility with the Senior Network and Security Administrator to maintain the integrity and security of our network. As Gallagher is a global security company, our threat model included APTs and active insider threats. After two years in Network and Security, I was promoted into the new User Experience Manager role.

##### *Key Achievements:*

- Used my memberships and contacts in NZITF, InfoSecNZ, and elsewhere, to stay abreast of security-related activity around the world (often TLP:AMBER or RED), and to recommend achievable changes to markedly improve our security posture
- As one of only two Linux experts within IS, I became the key maintainer for Gallagher's many Linux machines, including performing regular host-based security audits with Lynis, and implementing Linux server security hardening
- Implemented and managed internal vulnerability scanners - Tenable Nessus and Rapid7 Nexpose - and provided monthly vulnerability reports to the owners of the various servers to remediate
- Designed and implemented our internal PKI, including an offline encrypted root certification authority (Linux+OpenSSL), an online intermediate CA (Windows Server 2012R2), and distribution of the certificates via Active Directory Sites and Services

- Became the Subject Matter Expert for creating and managing SSL certificates that couldn't be created through the Microsoft Certificate Authority, such as UPS network interfaces, USBAnywhere devices, and other non-Microsoft-based HTTP clients
- Key player in our first major network upgrade in a decade: implemented a redundant fibre ring around our 10-building campus, replaced the core switch with a redundant pair of HP 5406zl2 switches, and implemented a new distribution layer (redundant Aruba 2930F switches). These made heavy use of LACP, VSF, and loop-protect to achieve a loop-free topology that was resistant to switch failure, spade-fade, broadcast storms, and user-implemented loops
- Implemented DHCP Snooping on the core and distribution layers, to prevent damage from rogue DHCP servers
- Additionally: performed firewall administration (Check Point R77 with Identity Awareness, Application Control, IPS, and Threat Prevention), managed our reverse proxy (Nginx) and upstream WAS (Incapsula), administered Check Point Endpoint E80 (including the Sandblast suite), managed VLAN configuration, and performed upgrades across our VMware cluster

## **Senior IT Systems Engineer – Forlongs Furnishings Limited, Hamilton**

**Dec 2014 – May 2016**

Forlongs was New Zealand's largest family-owned department store until its closure in 2016. Reporting directly to the Managing Director, my position was newly created as a result of back-sourcing after twenty years of external IT consultants. My role was made redundant as the result of Forlongs dissolving their retail arm and reducing their workforce from 77 to only 6.

### *Key Achievements:*

- Supported an enterprise-level system based primarily on the Microsoft Server 2012 stack (Active Directory, Exchange, RDS), running Cisco switches. These servers were on a VMware 6.0 platform, and storage was provided by an HP P2000 MSA SAN
- Urgently replaced hardware leased from the exiting IT contractors, while ensuring continuity of IT operations. This was a significant undertaking, including replacement of the company firewall, all backups, antivirus cover, and multi-site WAN
- Redesigned access methods for 3<sup>rd</sup> parties offering Forlongs finance. Moved from a Windows-based PPTP VPN, to a Linux-based portal over SSH. Customers and support staff describe my system as faster, more reliable, and less error-prone
- Identified and resolved major security shortcomings, including incorrect VLANs on DMZ-labelled ports, long-unpatched servers due to poor inventory management, and produced a proof-of-concept to demonstrate poor website security
- Managed the transition of phone lines to a new SIP trunk (VoIP), achieving savings of 72% on monthly phone expenses
- Designed and implemented a point-to-point wireless WAN to service three remote sites. This project reduced internet connectivity costs by 80% (removing 2x fibre trunks and 2x ADSL connections), and significantly increased network speeds
- Migrated from an under-provisioned VMware solution (entry-level vSphere Essentials) to Proxmox PVE virtualisation environment. This gave us the ability to do live migrations, host-based backups, and create a high-availability cluster
- Implemented and monitored security audits on all in-house Linux-based servers. These audits included daily scans with Lynis Enterprise, brute-force prevention with Fail2Ban, and real-time intrusion detection monitoring with Samhain HIDS

## **Founder, IT Consultant, Business Analyst, Developer – Gravity Computing, Hamilton**

**Apr 2007 – Dec 2014**

I founded Gravity Computing to create innovative and practical IT solutions for business. Originally providing general IT support, the 2008 global financial crisis saw the company pivot into writing software to automate business processes. In 2014 I took an opportunity to trade self employment for the security and stability of salaried work, while providing an opportunity for my lead developer to take the next step in his career.

### *Key Achievements:*

- Liaised with clients to effectively analyse requirements, then design, implement, and maintain IT solutions
- Managed and supported a small technical team of software developers and systems engineers
- Key person in charge of nurturing client relationships, sales, marketing, project delivery, and staff management
- As an IT consultant, I provided strategic advice to clients, and implemented agreed changes
- Took ownership of the entire IT stack, ensuring that the IT systems were always available for end-users
- During my time as lead developer, I designed and built solutions in VBA or Python, often on a MySQL backend
- Supported the development team in all aspects of database design, code development, debugging, documentation, etc

## My Formal Qualifications

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- **Bachelor of Science (Computer Science), Diploma in Law** University of Waikato, May 2011
- **ITIL v3 Foundation Certificate** (Candidate 9980017926067881) Axelos, Nov 2018
- **ITP Certified Technologist** (lapsed) New Zealand Institute of IT Professionals, Jan 2015
- **CompTIA A+ Certified Technician** CompTIA, 2000
- **Security clearance for SECRET (SV) classified materials** (expiry 03/2022) New Zealand Defence Force, 2016

## My Professional Memberships

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- **New Zealand Internet Task Force** Member # ericlight3913 March 2018 – Present
- **OWASP Professional Member** Member # 13176 March 2017 – Present
- **Association for Computing Machinery** Member # 3218535 February 2016 – Present
- **New Zealand Python Users' Group** Member # 13012663 April 2014 – Present
- **InternetNZ** Member # 676 June 2011 – Present
- **Institute of IT Professionals New Zealand** Member # 158062 October 2008 – October 2018

## My Continuing Professional Development

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- **ITIL v3 Foundation Certificate (ACE Training)** November 2018
- **Check Point Certified Security Administrator (RedEducation)** (R77) October 2016; (R80) June 2017
- **KiwiCon** Wellington 2018
- **OWASP New Zealand Day** Auckland 2016; Auckland 2017; Auckland 2018
- **Kiwi PyCon** Waitangi 2010; Wellington 2011; Auckland 2013; Wellington 2014; Wellington 2019
- **NetHui** Auckland 2011; Auckland 2012
- **Linux.Conf.Au** Wellington 2010; Brisbane 2011

## My Volunteer Work

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- Admin on InfoSecNZ Slack (500+ NZ-based Information Security Professionals) Feb 2018 – present
- Committee Member of the New Zealand Python Users Group Jul 2015 – present
- Secretary of the Waikato Branch of the Institute of IT Professionals Mar 2011 – Jun 2017
- Regular contributor to the open source security auditing tool, Lynis Sep 2015 – May 2016
- Mentor and founding Committee member of Hamilton's Innes48 Business Startup Competition Jan 2011 – Jan 2016
- Caterer and server at the Hamilton Homeless Trust most Monday evenings in 2015
- Member of the Board of Trustees at Newstead Model Country School Sep 2006 – Dec 2010
- Class Rep for many University papers across Psychology, Linguistics, Law, and Computer Science Mar 2004 – Nov 2008

## A few personal details

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I wrote my first code when I was eight years old, and so began a life-long foray into the field of Computer Science. I've spent time as a software developer, an IT consultant, a teacher, and a helpdesk operator. I'm passionate about IT Security, and have spent many hours reading material from Brian Krebs, Kevin Mitnick, and Bruce Schneier. This has given me exposure to the most important element of computing: people.

From my self-employed background, I bring huge dedication, energy, and commitment. I know how to work, and I work hard.

I have a passion for hiking, skiing, guitar, and computers.