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Introduction

I am an SRE, nerd, technologist, and coder with many years of commercial experience, most recently at GitLab for 7 years, lately as Principal SRE for GitLab Dedicated. I like building, understanding, and operating large complex systems, forging them into elegant and efficient machines with useful purpose, and seek employment that gives me the chance to do so. I enjoy helping others, both customers and colleagues, and consider it a great day when I can share knowledge with people around me.

Work Experience

Site Reliability Engineer - GitLab (Apr 2019 - June 2026)

Dedicated (Nov 2022 -> June 2026)

- Key contributor to the design and development of the single-tenant SaaS product GitLab Dedicated, which generated \$70M ARR as of mid 2026, and has continued to grow since.
- Kickstarted and built multiple major components including the early observability stack, networking technologies, and Geo migrations, and many other smaller pieces.
- Grew and developed the engineering teams in both size and capability, building a strong culture of automation at all layers, from internal processes, to IaC, to operations.
- Personally grew from Senior to Staff and then Principal level; currently the technical lead and architect responsible for high level direction, design, and technical output of a group of 40+ engineers across 5+ teams and multiple disciplines, while still actively contributing code and engaging in operations.
- Regularly identified and fixed broad technical and process problems before they became unmanageable, and was a key interaction point for other parts of the GitLab organization working with Dedicated.
- First-line on-call during the first few years, before moving to second-tier technical escalation (paged when a human needs technical leadership or assistance)

Scalability Team (March 2020 -> Nov 2022)

- SRE in a mixed Backend/SRE team responsible for detecting and addressing the large scalability issues affecting gitlab.com (the largest GitLab deployment in existence).
- Design/analysis of new developments to ensure they were going to scale acceptably when deployed.
- Continued on-call for gitlab.com

Reliability Team (April 2019 -> March 2020)

- Part of the team responsible for the uptime and stability of gitlab.com, along with the design of new architectural features.
- On-call for gitlab.com.

Devops Engineer - Flux Federation (Sept 2017 - Mar 2019)

- One of a team of 6 “Devops Engineers”, which in practice means the Operations team of a company that subscribes to Devops principles.
- Participant in the on-call roster
- Responsible (as part of the team) for the building, maintenance, and stability of the production and non-production environments of a Ruby on Rails application (and associated utilities) for Electricity Retailers clients in 3 countries, as well as internal delivery tooling (e.g. Gitlab, Jenkins, etc)

Senior Systems Administrator - Catalyst IT (May 2011 - Sept 2017)

- One of several Senior Administrators in a team of 10-15 responsible for the day to day administration of up to 1800 Ubuntu & Debian servers.
- Participant in the 24x7 on-call roster for the same fleet
- Hands-on involvement in all aspects of the system lifecycle, from design/architecture through to implementation, deployment, and ongoing maintenance + support. Also regular direct client interaction at various levels.
- From mid 2016 held the ‘Operations Technical Lead’ role
 - Providing mentoring and initial responsibility for the 4-6 junior members of the team, including allocating work, supporting them in performing their tasks, and responsibility for the quality of their output.
 - Responsibility for the general quality of the response of the larger on-call team.

Senior Systems Administrator - Opus International Consultants (June 2009 - May 2011)

- Senior Administrator in a team of 3 responsible for the day to day administration of 100+ Debian Linux servers providing the primary office support infrastructure for the company.
- Internal consulting support for regional IT staff, including reviewing and advising on technical designs, and informal education/training.
- Primary engineer for WAN networking and firewalls.
- Participant in the on-call roster providing 24x7 support for the company IT infrastructure.

Technical Consultant - AgResearch Ltd (Apr 2003 - May 2009)

- Primary administrator for the Linux Bioinformatics and ancillary servers, primary resource for networking technologies, and major contributor to security tasks.

Analyst/Programmer - Black Albatross (Computer Science Applied Research Centre), Otago University (Nov 1997 - Apr 2003)

- Duties varied greatly, including programming, analysis and design, systems administration, database administration, telephone support, and on-call duties. Environment was highly heterogeneous across many operating systems

Skills and abilities

Technical

- Large scale automation.
 - Designing and delivering automation of systems at tenant-scale, for a modern enterprise grade single-tenant SaaS product deployed on cloud provider infrastructure, at 99.9% uptime
 - Solving the complex technical problems of maintaining such systems to scale customer counts without equal scaling of human activity.
- Large scale SaaS systems
 - The art and skill of delivering and operating a large multi-tenant SaaS (gitlab.com) with 99.9% uptime
 - Solved large hard scaling problems, not only by applying scalable infrastructure but also by deep analysis of system and application bottlenecks to derive provable algorithmic optimizations.
- Strong familiarity with the practices of modern metrics and logging observability:
 - SLO/SLI/SLA monitoring, using common tools like Prometheus and Grafana
 - Centralized logging, most commonly the Elastic stack, but also some experience with others such as GCP logging, BigQuery, AWS CloudWatch Logs, and Athena.
- Systems administration
 - All aspects of modern system administration of Linux
 - Deployment of managed Kubernetes on Cloud Providers, and running significant scale production workloads on them.
 - Strong recent experience with cloud providers, mainly AWS but also some GCP. Highly fluent in many common AWS technologies (including IAM, S3, VPC, EC2, RDS, ElasticCache, EKS, Identity Centre) and exposure to many others including SNS, SQS, OpenSearch. Confidently able to pick up others as necessary with the derived skills.
 - Highly competent in all phases of system lifecycle, including design/architecture, implementation, deployment, operations, and ongoing monitoring/maintenance.
- Programming
 - Languages with recent production experience: Ruby, Jsonnet, Go, Bash, Terraform, Ansible.
 - Wide range of historical experience in many other languages.
- Networking
 - Basic competence with switching, routing, and simple network design.
 - Competent in the basic design, operation, and debugging of firewalls, load balancers, proxies, VPNs, and most other common network technologies.
- Troubleshooting

- Strong troubleshooting skills. Exposure to a wide variety of technologies, a programming background, and strong analytical process provide an effective skill base for diagnosing the root cause of problems and finding solutions.
- Particular strength in tackling difficult and obscure problems that evade common troubleshooting techniques, especially those involving integration of disparate systems.
- Handy with a wide range of troubleshooting tools, including packet sniffers, debuggers, live process monitors, and kernel tracing.
- Operating systems
 - Competent in day-to-day use of Linux, both desktop and server.
 - Historical experience with Windows, MacOSX, MacOS, OpenStep, Solaris, HP-UX and Tru64
- General
 - Competent in day-to-day operations of all the usual OpenSource suspects.
 - In short: if it's Open Source and runs on Linux, I've seen it, seen something like it, or will be able to figure it out with some time and (ideally) documentation.

Non-technical

- Ability to work:
 - Effectively in teams of various sizes, in time-critical situations, to diagnose, mitigate, and resolve major system issues, both in sync and async.
 - Independently on projects of any scale, managing time amidst conflicting demands.
 - On team-based projects, in various roles from support/advice through to technical lead.
- Ability to see opportunities for improvements in systems and processes, to propose plans to exploit these opportunities, and see those plans through to completion.
- Strong capability in mentoring, guiding, and developing other team members.
- Deep desire to learn new things regularly, and increase my understanding of how systems work.
- Strong personal ethical framework.

Education

Tertiary 1995-1997 University of Otago, BSc in Computer Science