

Summary

Senior Systems Engineer

I have a breadth of experience from working for a wide variety of companies and organisations. I am proficient at networking, deployment to cloud and container-based environments, and automating solutions to avoid repetition and errors. I love automation

and monitoring, and anything that helps free people's time to firefight less and do interesting work more. On the development side I'm comfortable with many languages on various environments and platforms. I also enjoy learning new things, and can do so rapidly. I work well as part of a team, and have management experience.

Key Skills

System Administration	Networking	Database Admin
Linux and Unix <i>Debian, Red Hat/Oracle/CentOS, OpenBSD, Solaris</i>	Design & deployment Management IPv4 & IPv6 Security Business continuity	PostgreSQL MySQL/MariaDB Elastic Stack
Automation <i>Puppet, Ansible, Saltstack</i>	VPN	
Monitoring <i>Zabbix, Prometheus</i>	DNS	
Applications	Development	Platform
Apache, Nginx Tomcat Varnish, LVS, HAProxy Exim, Postfix Git CI/CD <i>Jenkins, GitLab</i>	Python C Go Ruby UNIX environment <i>shell, sed, awk, ...</i> SQL Javascript	Kubernetes AWS, Azure, GCP Docker Virtualisation <i>KVM, VMWare</i> PC server Cisco switches, ASA

Natural languages: English (*native*), Norwegian (*basic*).

Experience

Redpill Linpro AS

Senior Systems Consultant

Redpill Linpro is the leading Open Source service provider in the Nordics. Working on-site with customers as a consultant. Assignments include:

OSLO, NORWAY
Aug 2016 – Present

Statens Pensjonskasse (Norwegian Public Service Pension Fund)

- Updated deprecated Puppet code to work with the current Puppet
- Worked on a major project to migrate from VM deployments to containers
- Deployed container clusters based on Docker Swarm
- Developed processes and components to automate deployment and monitoring within these clusters

NRK (Norsk Rikskringkasting, the Norwegian public broadcaster)

- Managed caches and deployment for delivery of the nrk.no website
- Deployed a new Jenkins infrastructure based on Docker
- Supported migration of CI/CD jobs to run in the new environment
- Set up Kubernetes clusters and processes to automatically deploy from CI/CD to clusters in multiple cloud providers
- Automated provisioning and configuration with Terraform, Saltstack and Ansible

- Migrated applications from bare metal, VMs, Docker and Mesos to Kubernetes
- Deployed Prometheus monitoring to better capture metrics

Fronter AS (Pearson/Itslearning)

OSLO, NORWAY

Hosting Director & System Architect

Jul 2010 – May 2016

Fronter was the leading learning platform for schools, delivered as a service over the Internet.

Responsible for the design, setup and management of the hosting platform. Ensure that the components that make up the application stack are deployed correctly, updated, and perform well in a setup that serves tens of millions of pages a day from several datacentres around the world. Support the organisation in its transition from traditional LAMP stack deployment to small, horizontally scalable applications connected by APIs running on arbitrary hosting environments with CI-managed deployments. Manage a team of system administrators and DBAs to achieve these objectives.

Detailed achievements:

- Designed a clustered virtualisation platform based on KVM
- Drove adoption of infrastructure automation based first on Puppet and later on Ansible
- Used automation to provide a cloud-agnostic deployment platform
- Deployed multiple bare metal datacentres and cloud installations
- Supported deployment of new technologies (MongoDB, CouchDB, node.js, Redis, ...) to public and private clouds
- Deployed a log management infrastructure based on Logstash and Elasticsearch
- Managed the process of becoming a RIPE LIR for routing redundancy and introduction of IPv6

SecureWorks (Dell SecureWorks)

EDINBURGH, SCOTLAND

Systems Manager EMEA

2009 – 2010

Dell SecureWorks is a market leading provider of world-class information security services with more than 2,800 clients worldwide.

General responsibilities included installation, configuration management and monitoring of server applications, management of the client estate, establishment and enforcement of security policy, network design recommendations, changes on internal and customer switches and firewalls and design and deployment of redundant SQL Server database solutions.

The estate included Windows and Linux servers and clients, Linux appliances and after SecureWorks acquired dns. This involved unification of Active Directory domains and migration of multiple servers and services, client machines and users to the new infrastructure. Specific requirements included network connectivity between sites in Edinburgh, London and 4 SecureWorks locations in the USA; migration to a common Exchange 2007 platform; integration and migration of internal applications and a smooth migration process for end users. The migration was successfully executed within 3 months and highly acclaimed within the company.

Participated in development of a high performance Snort-based sensor. Responsible for integration and debugging of custom packet capture interface.

Vianet Ltd.

DUNFERMLINE, SCOTLAND

MIS Manager

2007 – 2008

Vianet provided M2M (machine to machine) connectivity services based on GPRS/3G and VPN technology, and telemetry services for the vending and cashless payment industries.

Designed and implemented the core network for interconnection of the four major UK mobile network operators and customers. Developed a J2EE-based SIM provisioning & VPN management system to support this. Created a standard Linux-based Java/Oracle application platform to support a multi-tiered development environment. Specified hardware, software and storage requirements for the next generation of the vending telemetry platform. Third line support for GPRS/3G modems/routers and VPN connectivity for over 100 customers and 30 internal users. Line manager of second line support technician. Developed a variety of tools in Java, PL/SQL and Python including an HTTP gateway for DNS updates, a filter for messages sent over GPRS reducing protocol overhead costs by up to 30% and an SSL certificate management application. Managed Ubuntu, Redhat and Oracle Enterprise Linux, Windows 2003, Oracle 9i/10g, Exchange 2003, Cisco routers and ASAs and desktop operating systems. Deployed and maintained Apache, Tomcat, JBoss and JOnAS servers.

Education

Heriot-Watt University

EDINBURGH, SCOTLAND

BSc (hons) Computer Science

1995 – 1997, 2003 – 2005

Dissertation: *Lightweight Network Management Protocol*

Explored the design of a very light weight network management protocol usable over slow, unreliable connections (specifically GPRS) from a variety of devices. Implementations were built in C for Linux, MacOS X and PalmOS.