



CURRICULUM VITAE

Hi, my name is Lewis. I've worked within networking & systems for 10 years. In that time I have been involved in a variety of projects, each interesting and rewarding in their own way, yet so far I have found projects that somehow involve networking most enjoyable.

Professional Summary

Although I have experience with a variety of technologies, such as: Linux, FreeBSD, AWS, Python and VMware – to name a few, I think mostly it's my strong networking skills which has helped me to become good at what I do. Knowing how things connect & communicate makes problem solving and understanding much easier.

Whether I'm configuring Cloud services, redesigning a network, writing a program or discovering new methods of automation, I take pride in creating things to be as effective and maintainable as possible. Unfortunately I haven't had chance to take any AWS or Juniper certifications yet, these could be a good focus for personal development.

Skills

- Juniper Networks - Use of EX, SRX and MX platforms, with mostly BGP and IS-IS protocols. QoS, flow or packet based filtering. OSI model familiarity and site-to-site IPsec VPNs.
- AWS - Most recently S3, VPC, Route53, WAF, EKS and ALBs.
- Python / Shell scripts - Programs / scripts for platform integrations and functions.
- DevOps - Increasing experience with Kubernetes, Docker, GoCD, Jenkins, Ansible and Terraform.
- Monitoring - Nagios, Cacti, LibreNMS and New Relic
- VMware - vSphere version 5 to 6.5, NFS and iSCSI shared storage.
- NetApp - Clustered mode FAS and AFF.
- Sophos - UTM and client VPN.
- Operating Systems - Linux / FreeBSD for applications or infrastructure.
- Asterisk / AGI / SIP - Telecommunications utilities.
- MySQL - Tiered relational master / slave databases.
- PostgreSQL - Standalone and Greenplum massively parallelised databases.
- Traffic Managers - Brocade / Pulse Secure / Stingray software traffic managers.

Experience

Jun 19 – Aug 19

*Rullion Limited,
Manchester*

Development Operations Engineer

Hired as a DevOps engineer to drive change within the development department. Primarily tasked with building or maintaining automation and establishing new CI/CD integrations, as well as a new release process policy – thereby bringing the department's technology more up-to-date with industry standards.

Technology and tooling so far:

- Jenkins
- Pipelines
- Jira
- VMware
- GitLab
- Ansible
- Scripted deployments

Mar 19 – Jun 19

*Missguided Ltd,
Manchester*

DevOps Administrator

As a member of the operations team at Missguided, I helped support the AWS Cloud infrastructure which runs the company's website, systems and testing environments.

Much of our time involves making sure the website continues to operate reliably and quickly. Utilising Terraform, source control and an established release process, we work closely with developers and architects to support and continuously improve the infrastructure.

Some of the tools we use to achieve this are:

- Jira for release management,
- Confluence for documentation,
- Jenkins for builds and automation,
- GitHub and Git for source control,
- Terraform and various AWS services, plus
- New Relic (with Prometheus and Grafana) for monitoring

Recently, I have been helping the business venture into the world of containerisation by creating an AWS EKS (Kubernetes) cluster.

2013 – 2018

*ResponseTap Ltd,
Salford*

Senior Network & Systems Administrator

Hired as a systems engineer, but also chiefly responsible for redesigning and maintaining their network – such that it could support the company's growth and provide enterprise-class service.

One of the most memorable projects I managed for ResponseTap was the expansion into a new data centre. I toured a few different data centres in the area, weighed up their pros and cons, reviewed contract details, and made my recommendation to the CTO. Following, I installed: 16x Dell servers, 2x core switches, 2x access switches and an edge router, as well as orchestrated the installation of a NetApp SAN by a 3rd party, and arranged cross-transit connections. This project was a lot of work for one person, but highly satisfying.

Another was to devise a new process of storing call recordings with increased efficiency and lower risk. To do this, I designed, wrote, tested and deployed a custom Python program which waits for recording files to be closed, then transfers them to storage and signals completion to other apps via AWS Kinesis. It went through several iterations to become fully featured and proved to work rather well.

Some things the role has included:

- Liaising with tier 1 and 2 carriers.
- Interact with vendor technical support.
- Creating control and data plain security policies.
- High availability SRX firewall cluster (with IDS/IPS support).
- Mentoring junior engineers.
- Remote network security testing.
- Site-to-site IPsec VPN tunnels between data centres, offices and AWS regions.
- Implement QoS for VoIP/TCP data.
- Deploy IS-IS and simplify BGP at switching level.
- Plan and configure PI IPv4 and IPv6 allocations.
- Network traffic and security log anomaly investigation.
- Packet capturing for network and SIP troubleshooting.
- Virtualisation with VMware vSphere.
- Maintenance of infrastructure servers (DNS, DHCP, etc).
- Monitoring with Nagios, Cacti, PagerDuty.
- Assist CFO with budget tracking and recurring costs.
- Build GoCD cluster.
- Manage Ubiquity WiFi system.

2007 – 2013

*Self-employed,
Leicester &
Manchester*

Network & Systems Contractor

Contracted to help out with a variety of projects and also perform regular maintenance for businesses that didn't have a full time engineer. The role included:

- Installed BGP routers to form a new AS.
- Build monitoring solutions.
- Troubleshooting and support for co-located servers.

- Managed Java applications and database services.
- Replace outdated DNS servers.
- Performed a mail server migration, with added content filtering and support for virtual domains.

Education

2004 – 2008	<p>BSc Internet Computing – First-class with Honours</p> <p><i>De Montfort University, Leicester</i></p> <p>Final Year Modules: Multi-service Networks; Open Source Software Development; Functional Programming; Software Quality, Professionalism & Ethics</p> <p>2nd Year Modules: Further Programming; Internet Software Development; Systems Programming; Database Design & Implementation</p> <p>1st Year Modules: Introductory Java Programming; Computer & Internet Fundamentals; Introductory Database Implementation; User-Centred Web Interface Development</p>
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Achievements

Jun 2005	<p>Certificate of Achievement</p> <p><i>De Montfort University, Leicester</i></p> <p>Awarded with a certificate of achievement and a modest prize in recognition of my contribution and 1st year exam results.</p>
May 2004	<p>Open Water PADI Certification</p> <p><i>Elounda Beach, Greece</i></p> <p>Took part in a four day SCUBA diving course. Performed a number of practical underwater tasks and took written tests. Learnt the critical theory and safety aspects of diving. The experience taught me about the importance of trust. In the ocean, anything can go wrong. Being able to trust in oneself and others, is essential. It was both challenging and unforgettable.</p>

Interests

In my leisure time I like to socialise, watch films, sometimes play games or listen to a wide spectrum of music. I miss playing frisbee with friends, going indoor rock-climbing or practising skating. Over a year my goal is to enjoy those things again.