

Personal Summary

Linux Engineer with a wide knowledge of HTTP and web services. Advocate of automation, containerization and version control; aiming to produce highly reproducible and scalable infrastructure. Knowledge over a variety of IaaS platforms, such as AWS and GCP, as well as knowledge of building PaaS solutions using Docker and Apache Mesos.

Huge fan of ChatOps, bringing monitoring and deployment tools into the forefront of a team's workflow. This encourages transparency, with all of the team having visibility over what's happening across the day. Extensions of this involve writing services and tools that fire off chatroom events, from monitoring right the way through to code deployments and infrastructure changes.

Skills

- Linux, Debian 8 & Ubuntu 14.04 onwards
- Python 2.7 & 3.6, including Flask(-RESTful)/asyncio/pytest/mypy.
- Clojure, including Ring/Compojure & core.async.
- AWS and GCP IaaS plus VMWare.
- HTTP knowledge, HAProxy/Nginx/Apache.
- Containers and orchestration both Mesos+Marathon and Kubernetes.
- SQL and NoSQL storage, MySQL/Postgres RDBMS and Elasticsearch/Redis/Cassandra.
- Hadoop, including Spark/Kafka.
- SaltStack/Ansible with Terraform provisioning.
- Monitoring, statsd/collectd with Riemann/InfluxDB.
- CI and CD skills, Drone/Jenkins/Git.
- Agile Workflow, Kanban and Scrum.
- Management and tutoring.

Achievements

- Scaled an RTB advertising platform to over a million events a second while keeping operational overhead low, through configuration management, failure (chaos) testing and using IaaS services where applicable.
- Lead systems administrator on a full platform upgrade for independent.co.uk & standard.co.uk, migration from Escenic 5.3 to 5.6, moved the platform to a fully redundant and resilient design.
- Implemented configuration management (SaltStack) across all environments, this massively reduced turnaround times for environment builds. In some cases provisioning times went down from days to a matter of minutes.
- Supplied industry leading customer service at Catalyst2, winning 2 ISPA awards including Best Business Customer Service.

Experience

Crowd Emotion (Element Human) – July 2019 – Present, Senior Engineer

Developed a brand new PaaS for market research. Platform reduced lead time on market research data gathering down from weeks to hours. Platform was built as an API first design to allow third parties to build and integrate their existing workflows into our tool. Developed engineering culture at the team, pushing for a fully automated workflow for engineers using extensive automated testing to deliver correct software to production multiple times a day.

Infectious Media – November 2016 – March 2019, Lead Site Reliability Engineer

Leading a team of four engineers managing our internal advertising platform. This included scaling from just the EU to being a global business in the US and APAC, scaling up to 1,000,000 requests a second at a 50ms response time. Created a culture of software testing within both the operations and data teams, enabling us to deliver quicker and with fewer defects. Developed a user history data pipeline, from pixel event through data processing to database ingestion for over 600 million users and 25 billion events a day.

Infectious Media – January 2015 – November 2016, Production Engineer

Migration from a static traditional architecture through to a more dynamic cloud oriented design, scaling based upon resource needs. A 30% reduction in total operating cost was achieved through more efficient resource utilization as a result of this change. Implemented a continuous delivery (and continuous deployment) pipeline to enable quicker iteration with a lower business risk. Assisted development team with building a highly available platform, looking at what technologies we can use to prioritize availability over consistency where the data suits.

First Clarity & Evolok – September 2013 – January 2015, Systems Administrator

During my time at First Clarity & Evolok I worked with UK and international publishing houses on a variety of projects, from full stack infrastructure and application upgrades through daily maintenance. Examples of work include a Drupal 7 upgrade for chilternrailways.co.uk, upgrade of Global Blue edge caching strategy, upgrade of CMS for independent.co.uk and telegraph.co.uk.

Catalyst2 – September 2012 – September 2013, Technical Specialist

My primary duties are the management of customer queries and complaints ensuring we met our SLAs, this was a mixture of both help desk as well as break fix work. Other duties included maintenance of our infrastructure, documentation and hardware development.

LDE Data communications September 2008 – June 2011, Data Communications Engineer

Maintained and developed a large communications network over a variety of mediums to ensure an effective, reliable and dependable service to the customer. Job included development of networks from the planning stage through to installation and maintenance.

Education and Qualifications

Environmental Management 2:2 (BSc Hons), achieved 2012 from University of Worcester.

References available upon request. <https://github.com/Pooqles>