Alex Trull

TECHNOLOGIST AND ENGINEER

+34 654 766 888

2024.public.cv.alex@trull.org

https://github.com/atrull

https://gitlab.com/atrull

https://www.linkedin.com/in/atrull



I've an Internet Service Provider and Consultancy background and over 20 years experience. I like breaking new ground in Automation, ensuring consistency, delivering high quality, and building Deployment/DevOps strategies. I am adept at collaborating with all levels, from the CEO to Desktop Support. I have extensive experience in Security, Release management, and Prototyping across multiple Cloud and legacy DC, automating repetitive processes to delivering working proof of concepts that expand as the foundation of Great Architecture.

Based in Spain, I prefer remote but am open to time onsite for key milestones.

HIGHLIGHTS / TAKEAWAYS

- Helped Launch the first phone-app based direct insurance in Brazil. / Altered the local market forever.
- Recovered an ISP from a total outage and rearchitected to avoid repeats. / DNS should be distributed.
- Showed a Global Bank how to do git/CI/CD on IBM mainframe with Jenkins. / Everything on my laptop including the System Z.
- Migrated a government department's ticket system to a locally hosted solution. / Leadership thought it was impossible but the risk paid off.
- Implemented Hashicorp Vault to solve SOC2 Compliance for multiple databases. / With Implicit password rotation via TTLs.
- Helped launch a new Yellow Pages site for three countries. / Overturned a culture of manual deployment. This was my DevOps Awakening.

- Produced a complete reusable Chef Server as part of the CINC project. / As Terraform Module.
- Advised the Ministry of Defence to stop sharing private DNS records in public. / They fixed it shortly after I reported it.
- Deployed the first Global Cassandra Cluster I know of. / Fully Automated and in all AWS regions on top of Opscode Chef and EC2 Autoscaling.
- Automated a Clinical Trial hosted in a 'Hostile Cloud Environment'. / AWS China is built different - so the keys were kept well away from the Data and everything was checksummed.
- Saved the Glastonbury Festival Website. I was brought in to investigate the Loadbalancer. / Instead I fixed the Backend.
- Wrote Terraform for defining policy of new AWS accounts / Previously it meant touching 10 files without templating.

EXPERTISE

Mentoring & Coaching

- Helping my colleagues level-up and overcome hurdles.
- Promoting innate creativity but facilitating change as necessary.

Systems/Configuration

- Administration and Configuration management of common Linux, Unix, BSD derivatives and Windows.
- Chef, Ansible Puppet, Salt, CFEngine, Opsware and Powershell DSC.

Virtualization / Containerization / Imaging

- Host-based Virtualization with K8S [EKS, AKS, GKE], ECS, Azure App Services, Docker, Jails and Zones.
 - Packer and general Image Development
 - Virtualbox / Vagrant / KVM / Qemu / BHYVE

Development / Code Management / Build

- Scripting from Bash/Shell to most modern interpreted glue languages including PHP/ Python/Go/Rugby/Javascript etc.
- Revision Control, Build, Continuous Integration/Deploy systems with Github, Gitlab, Jenkins, Azure, FluxCD

Application and Database

- Various Web/Mail/Network/Application and backends like SQL, NoSQL and Graph Databases.
 - Webserving Apache/NGINX, Lighttpd /IIS

Network Architecture and Administration

- V4/V6 networking, OSI layer and WAF/WAN/ LAN/VPN/VPC/TGW, BGP/OSPF and DNS.
- Switches/Routers/Loadbalancers from Cisco, Juniper, Nortel, Cloudflare and most Major vendors.

Storage and Storage Area Networking

 Numerous SANS and network/high capacity filesystems including ZFS/NFS. S3 Cloud Storage et al.

Monitoring

• Extensive experience building with Nagios, Zabbix, Sensu, Grafana LGTM, OpenTelemetry and Cloud-based stacks (Cloudwatch et al).

Application Routing

• Configured NGINX/K8S Ingress, Traefik, HAProxy and Keepalived and most common Load balancer deployments

Cloud Automation / Architecture

- Azure, Amazon AWS, Google, Vultr, Openstack and on-prem hypervisors.
 - Terraform, Cloudformation, ARM and API

Security/Protocols

- X509, PKI, SSL, TLS, SSH, HTTP/REST, oAuth/OIDC, MTLS and CA Management
 - Hashicorp Vault / AWS secrets / Azure Vault.
 - Numerous IDS/NIDS/Code Quality tools.

CAREER

February 2021 - August 2024, Devops Engineer/Architect (Contract) - *Dye & Durham International* Built the first DevOps pipeline in the business. Lead on automating deployments related to: Direct Public Websites/Apps, API gateways, ETL. Automated 100 separate cloud accounts (involving 30 Products) - on AWS, Azure and GCP. SSL, WAF / Cloudflare. AWS Identity Centre. Integrated Hashicorp Vault for Database Management (SOC2 Rotation) and K8S/Azure AD/GCP access. Centralised IPAM solution to manage multiple clouds firewalls. App migration between clouds. Dev Environment Scheduling for Cost Control (finops). All completed and maintained in Terraform with GitOps. Mentored/lead other engineers and lead on architecture, outages and debugging.

June 2018 – January 2021, Lead Devops Engineer/Architect (Contract) - Clearchannel International Helped build DevOps capacity for one of the leading Out of Home Advertising groups. Reporting directly to the CTO, environments were both Cloud-based deployments and stack for street-based physical advertising hardware (10K+ nodes). Working with a team of 5 engineers, providing strategic thinking on technology choices, standards for Security, CI, Testing, Deployments, Billing, Code Management, etc. Deployed Hashicorp Vault (cross-cloud secrets management). Introduced 12factor. Opensource contributions: The CINC module for AWS and wireguard AWS module.

November 2017 - May 2018, Senior Engineer (Permanent) - Automation Logic

Working embedded with Lloyds Bank on their critical Public Cloud project. Established strong standards for Automation as the Senior Engineer for Chef/Packer/Terraform - helping get the most out of the tools for the bank and occasionally feeding back improvements upstream. This has been creative work around building multi-environment multi-cloud infrastructure in a fully dynamic way. Extra focus on Testing and Compliance with Chef Automate and related tooling (inspec, rspec, chefspec, rubocop and others). Other Tools used - Github Enterprise, Jenkins, Vault – Cloud infra from Azure, AWS and GCE.

March 2017 - November 2017, Embedded Automation Engineer (Contract) - *Agilesphere*Working with HMCTS/MOJ. Focus on improving infrastructure-as-code for the Common Platform project. Working with a large agile team with a high bar of excellence. One of the critical side-projects I've been involved with is delivering the Atlassian suite in Azure for this client, which I have recovered from near-disaster, and building a strong framework around the document redaction system.

July 2015 – January 2017, Lead DevOps Architect (Contract) - *McKinsey* – Global, global clients. Working in the Digital Labs group. Focus on introducing strong workflow and infrastructure-as-code practices to operations and development teams all over the globe. Worked closely with clients to bring success and show new ways of working. AWS, Hashicorp products and various cloud services. Also prototyping for banking mainframe release management, encryption at rest in "unfriendly territory".

November 2014 - July 2015, DevOps / Infrastructure Consulting Engineer (Contract), *DevOpsGuys* Engaged with various Government Departments. Performing external assessments of existing projects at various stages. Guidance related to DevOps, typically as a Troubleshooter helping salvage projects and boost success in planning phases.

March 2014 - July 2014, Automation Consultant (Contract) - *Chef (Opscode / Progress)*Technical consultancy training customers on how to integrate their processes with Chef – mapping infrastructure to Chef's paradigms, promoting DevOps best practices and scale deployment. Covering both the fundamentals as well as advanced subjects such as cookbook and infrastructure testing.

May 2012 - March 2014, Devops/Cloud Engineer (Permanent) - Medidata Solutions

Working in the DevOps department as lead 'Convergence' engineer. Responsible for 90% of the software deployed by the company. Rails/Tomcat on EC2 and configuration management with Opscode Chef.

October 2010 - October 2011, Lead Architect/Release Eng - *Truvo* [Yellow Pages for .BE .IE .PT .ZA] Acting as the "DevOps" bridge between between developers and external sysadmins. Designed and built a Lab environment (Kickstart/Puppet/PXE boot). Automated deployments and enforced standards.

January 2010 - August 2010, Infrastructure Architect/Security Engineer - *Encore Tickets*Rearchitected client's network to pass PCI-DSS, with new network, firewall and systems configuration.

September 2007 - December 2009, Technical Consultant - *S2S, part of NG Bailey Group*Systems/Security/Network expert in a Cisco Reseller/Professional Services company, in addition to managing internal infrastructure I worked on projects in Banking, Brokerage, Investment, Legal and Retail. Monitoring with Nagios, Opsware to manage Switches, Routers, Firewalls and SANS.

February 2006 - September 2007, Lead Systems Engineer - *Cable & Wireless Access*Systems engineer in the Data Operations Team. Responsible for maintaining and supporting all Bulldog's internet services (mail, dns), sign-on authentication (radius, LDAP), Juniper Routers.

June 2005 - February 2006, Services Support Engineer - Easynet

Responsible for maintaining and supporting all Easynet UK's customer-facing Unix & Windows based services (Traditional pre-google ISP) as well as the back ends (Oracle, MySQL, LDAP, Radius) and SANs.

April 2002 - June 2004, Systems and Network Administrator - *Hybyte Solutions & Services*Managed infrastructure for an SMS aggregator with secure connections to large provider gateways.

May 2001 - April 2002, Internet Consultant & Systems Administrator: *Unity Design (Saatchi & Saatchi)* Managed Hosting for Clients such as MOD, RN and Xerox.

April 2000 - May 2001, Open Source Researcher & Engineer: *Trigenix (Qualcomm)* The startup's first engineer. WAP/SMS gateway (Alligata based on Kanel) and RPM builds.

QUALIFICATIONS AND CLEARANCES

2018: DBS 2006: LogicaCMG Voicemail

2017: DBS, BPSS (x2) 2005: Juniper (Siemens) SDX, SteelBelted

2015: DBS (Juniper) Radius, SunOne/Fedora Directory,

2009: Enterasys ECIE-C,ECIE-D,ESE,ESSE-D,DID

Juniper NSM.

2007: CCNA 1999: MCSE, A+

MISCELLANY

Nationality: British

Primary Language: English

Functional Language: French/Spanish/Afrikaans/German/Dutch

Beginner: Ukrainian/Russian/Polish

PGP: 4104 BB9C A39E 1250 8BF2 28E5 7B2E 26EB F796 C534 | https://keybase.io/atrull