Alex Trull

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[*An up-to-date version of this resume is always available at https://trull.org/alex/cv/*]

Professional Objective

An Infrastructure Architect and Engineer with a range of experience to bring from both an ISP and Professional Services / Consultancy background. I understand the "big picture" when it comes to technology and business need. I love helping organizations break new ground in Automation. Consistency, Quality and Deployment / DevOps.

I enjoy working in Agile Teams – bringing teams up to better methods of working. I'm comfortable working with all levels in an organization from CEO to Desktop Support. Furthermore I have strong experience doing Infosec, Release management, Prototyping across multiple Clouds and legacy DC – automating away repetitive processes – delivering real proof of concepts. I still keep my Unix command-line skills hot in my spare time.

I am specifically looking for **Remote Work.** *I am based in Spain but still have some presence in the UK. I am open to and recommend some time onsite to kick off projects, confidence, velocity and momentum.*

Professional Highlights

- Helped Launch the first phone-app based direct insurance in Brazil. *Now No.1 and altered the local market forever.*
- Helped an ISP recover from a total outage and re-architect to avoid repeats. *DNS is better when it is distributed.*
- Showed a major US Bank how to do git/CI/CD on IBM mainframe with Jenkins. *On my laptop. Including Mainframe.*
- Migrated a government department's ticket system to a locally hosted solution. *Management didn't think it possible.*
- Helped launch a new Yellow Pages site for three countries. *Don't pay people by the hour to do manual deploys.*
- Helped a major military stop sharing private DNS records in public. *Saw information I didn't want anyone to know.*
- Launched the first truly Global Cassandra Cluster I know of. *Fully Automated deployment in all AWS regions.*
- Automated a Clinical Trial backed by a Chinese 'Hostile Cloud Environment'. *Don't keep the keys near the data.*

Skills History / Experience

Roles	Years
Systems Administration	21
Network Administration	18
Information / Security Administration	18
Infrastructure Architecture	16
Storage (Area Network) Administration	10
Virtualization Administration / Cloud	14
"DevOps" / Deployment / Release Management and Automation	12

Work History

Devops Engineer/Architect (Contract)
"Dye & Durham International" – Global, Anglosphere, Property Risk Data & Conveyancing Process Management.
May 2021 – Present

Helped automate the first working DevOps pipeline in the organization. Integrated monitoring into the DevOps process. Migrating Datacenter to Cloud. Using AWS & Azure, Cloudflare and Pagerduty, Terraform, MySQL. I've taken then lead on automating deployments related to: Direct Public Websites, API gateways, ETL services, Robotic Process Automation and more.

Lead Devops Engineer/Architect (Contract)
"Clearchannel International" – Global, Outdoor Advertising.
June 2018 – December 2020

Helped build and extend DevOps capacity for one of the leading Out of Home Advertising groups. Reporting directly to the CTO, Worked as the expert for solving complex problems with critical infrastructure and resolved several outages and breaches, going on to address the causes. 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 (Secrets management for cross-cloud apps). Introduced 12factor to the engineering team to boost Container/Docker adoption. Also worked on a high performance key scanner/disabler and a screenshot storage solution to capture data from huge numbers of display panels.

In Open Source I made major enhancements to the jmhale/terraform-aws-wireguard module (it's a great VPN module, easily integrated with existing infra) and wrote an awesome module to deploy CINC server (a chef reubild) in AWS.

Tooling and Services used: AWS [ECS, EKS, IAM, KMS, Cloudtrail, Guard Duty], Azure [AKS, Key Vault, Pipelines, Monitor Logs, RBAC], Kubernetes [Helm, Ingress], Terraform, WireGuard, Vault, Chef, Jenkins, Travis-Ci, Github, Docker, Python, Ruby and others.

Senior Engineer (Permanent)
"Automation Logic" – UK, Private and Government Clients.
November 2017 – May 2018

Working embedded with High Street 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.

Embedded Automation Engineer (Contract)
"Agilesphere" – UK, Government Clients.
March 2017 – November 2017

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.

Tools used - Ansible, Azure and VMware's VDC/VAPP platform. Gerrit Code-review and Zabbix monitoring. We are working to get Kubernetes in place along with more modern practices, but it is not a simple switch and there is significant skills-gap to support this.

Lead DevOps Architect (Contract)
"McKinsey & Company" – Global, global clients.
July 2015 – January 2017

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. Showing clients and their teams where to focus efforts to maximize rate of improvement and bring real value, with Agile practices. I've worked alongside some amazing people in this role and together we have helped bring great positive change to clients.

Heavy use of AWS, Hashicorp products and various cloud services. Also prototyping for banking mainframe release management, encryption at rest in "unfriendly territory". Work done with clients in the USA, Brazil, China and other locations.

DevOps / Infrastructure Consulting Engineer (Contract)
DevOpsGuys – UK
November 2014 - July 2015

Working with various Government Departments and outsourced teams to help guarantee project success – at both technical and non-technical levels: for instance bringing stability and consistency to infrastructure automation and CI pipelines as well as rebuilding trust between teams and trust in technology. Performing external assessments of existing projects at various stages. Additional work on guidance related to DevOps and project success, typically as a Troubleshooter brought in to help rescue projects going off the rails and / or consult and implement new tech / best practices for projects in the planning phase. Contributions to Configuration Management Cookbooks/Formulas.

Technologies also used: Docker, Kubernetes, Jails & etc.

Automation Consulting Engineer (Contract)
Chef (Automation for the new IT - Formerly Known as Opscode) – Seattle, SF, London with Customers Worldwide
March 2014 - July 2014

Working in the Consulting group as the first Automation consultant hired for Europe.

As a Consulting Engineer I was responsible for a combination of Pre and Post-sales Technical Consultancy and delivering training both to public groups and to private companies.

Technical consultancy to help customers integrate their processes with Chef – for instance mapping infrastructure to Chef's paradigms as well as promoting DevOps best practices to help scale safely without complications, such as Continuous Integration/Delivery with Chef-managed infrastructure.

The training I have delivered has been well received by both members of the public and private groups. Covering both the fundamentals as well as advanced subjects such as cookbook and infrastructure testing.

The role has also included some non-technical PR/Speaker work – I have also gone to help support DevOpsDays on behalf of Chef, being a public face at conferences and meetups as well as give talks.

I continue to maintain some Community cookbooks to this day.

Devops/Cloud Engineer (Permanent)
Medidata Solutions (Cloud-based Clinical Trials) – London, NYC, Tokyo, Customers Worldwide
May 2012 - March 2014

Working in the DevOps department as lead 'Convergence' engineer. This department being responsible for 90% of the software deployed by the company – typically Ruby on Rails or Java on Tomcat (Ubuntu on EC2).

As a Lead Engineer I was broadly responsible for defining Standards, driving Innovation, actual Coding and Training both Tooling, Operations and R&D teams with the following:

Use of shared tools deployment tools such as Opscode Chef, introduction of new tools and workflow. Introduction of AWS cloud resources (S3, RDS, Elasticache) across development groups. Feeding back on issues with Corporate IT, R&D, Management and Security. Working on Multi-Region Cassandra Deployment along with Netflix's Priam and a cookbook to manage encryption of data at rest with a remote keystore with the chef API (encrypted_blockdevice). Several other complex and useful cookbooks, some made public (filesystem, ephemeral_raid).

Lead Infrastructure Architect/Software Release Engineering (Contract)
Truvo (Yellow Pages) – Belgium, Ireland, Portugal and South Africa
October 2010 - October 2011

Acting as the "DevOps" bridge between internal developers and external service providers (managing internal and external Systems Administrators). Designed and built a heavily automated / standardized Lab environment (with Kickstart and Puppet) to support a department of developers handling multiple projects and their integration with common APIs (SSO, Bookmarks, etc).

Automated deployments and enforcing build standards, overseeing releases and managing expectations with Monitoring and other tools. Consulted to provide savings from 480K Euros to 180K per year in hosting by cutting back on extraneous and unnecessary services provided by vendors.

Also performed Vendor appraisal on behalf of this client to investigate alternative hosting options such as alternative cloud providers and internal cloud "stack" options (OpenNebula, OpenStack, Eucalyptus, etc).

Lead Infrastructure Architect/Security Engineer (Contract)
Encore Tickets London
January 2010 - August 2010

Assisted the CTO in applying Payment Card Industry standards (PCI-DSS) and development of compliant policies while streamlining operational business processes to make up for the intrinsic administrative overheads imposed by such standards. This helped to avoid the PCI council from shutting down my client.

Securing IT through Network segregation, Two-factor VPN development, Build/Configuration Standards documentation and implementation, ESX Environment implementation, Secure Access Control and GPS/RF-synced NTP Designs.

Automatic re-installation and standardization of all desktops with unattended installation methods.

Technical Consultant (Permanent)
S2S Limited, part of NG Bailey Group

September 2007 - December 2009

Systems/Security/Network expert in a Professional Services company. Consulting to outside parties as part of the Professional Services engagement at pre-sales and in-project stages, in addition to Managing internal infrastructure. Working on Projects and providing Services to clients various industries, including Banking, Brokerage, Investment, Legal and Retail.

Monitoring and Compliance deployments using frameworks such as Opsware Network Compliance, Nagios and Cacti. Sourcing or writing code to analyze all aspects of infrastructure – from WAN to Host and SAN, VOIP and Firewalling. Projects undertaken for many clients including a top Private Equity group and one major Inter-Dealer brokerage.

Lead Systems Engineer (Permanent)
Cable & Wireless Access
February 2006 - September 2007

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 E-Series QOS/Access Management (SDX) and more. Operationally on-call one week in four as part of my systems team, as well as taking the lead on new technology as our environment developed.

Technology rollout and migration such as 8 Meg ADSL, Redline to Juniper migration, LDAP, Radius, Juniper E-Series and SDX, DNS management and improvements (Loadbalancing, etc) Monitoring and Capacity Management Platforms - Nagios and Smarts, Graphing performance with with Cacti, Infovista, Smokeping and other bespoke rrdtool-based applications. Netscreen enterprise filtering and host firewalling with Solaris, FreeBSD and Linux. VPN Administration.

Services Support Engineer (Permanent)
Easynet UK
June 2005 - February 2006

As part of the Services Support team. Generally responsible for maintaining and supporting all Easynet UK's customer-facing Unix & Windows based services (mail, dns, news, web hosting and more) as well as the back ends (Oracle, MySQL, LDAP) and middleware access accounting (radius). Business as usual: researching and solving problems brought up by first line support and internal monitoring. Working with internal and external parties such as Akamai and Hitachi DataSystems on outages and maintenances.

Systems and Network Administrator (Permanent)
Hybyte Solutions & Services - SMS services
April 2002 - June 2004

Working with Development teams, Clients, Cellular Operators and ISPs on service rollouts, access queries and troubleshooting, Administration of a small (10 host) production Unix platform. This was DevOps, in some ways.

Development of Clusters of Application servers for high-process numbers: Tomcat, Apache2.x and MySQL servers in full-time replication, Mail servers running Postfix IMAP4-backed webmail. Handling Email-to-SMS Traffic. High-Availability Firewalls (Cisco Pix) and Shell-scripted Backups.

Internet Consultant, Security Analyst, Systems Administrator (Permanent)
Unity Design - A Branding/Design Agency (Now part of Saatchi & Saatchi)
May 2001 - April 2002

Provided professional Unix Systems Administration and Security Consulting to Unity and her clients, including the Ministry of Defence, the Royal Navy and Xerox, with whom I worked on all technical issues. Responsibility for all the sites/servers controlled by Unity - covering new builds and management of all systems and networks.

Open Source Researcher & Engineer (Permanent)
Trigenix - A 3G Tech Developer (initially called 3GLabs) - Became part of Qualcomm
April 2000 - May 2001

The company's first engineering employee and a member of a team which developed the first commercially supported WAP/SMS gateway (Alligata). A varied role which included working on build processes, bug tracking, scripting, monitoring and licensing research. I was given the honour of naming the first project's code word: "Mussorgsky".

Technical Skillset

Systems Administration

    Redhat/Centos, Debian/Ubuntu, Most BSDs and Mac OSX, Solaris 7+ and derivatives, Windows NT+

Virtualisation/Cloud

    Azure, Amazon AWS, Openstack, GCE, Hypervisors from Vmware ESXi/Vsphere, Citrix Xenserver, Virtualbox/Vagrant and KVM/Qemu-based systems. Image development with Packer.

    Docker Host-based Virtualization with FreeBSD Jails, Solaris Zones and Linux Vservers.

 System Automation

    Config/Systems Management using with Chef, Puppet, Salt, CFEngine and Opsware

    Unix/Linux System deployments using PXEboot, Cobbler, Kickstart and Jumpstart.

Development / Code Management

    Scripting with (Bourne(Again)) Shell, Perl and PHP, Ruby, Python, Golang, etc.

    Build/Continuous Integration systems with Make, Ant, Maven, Gradle, Hudson/Jenkins, Bamboo and CircleCI, ADO, Github Actions.

Network Administration

    V4/V6 and ommon routing protocols (BGP, RIP, OSPF, EIGRP, ISIS) and other WAN/LAN technologies.

    Routers and Switches from Cisco, Juniper, Brocade and OpenBGPD/OpenOSPFD and Quagga platforms.

    Loadbalancers such as Brocade ServerIron, Nortel Alteon, Cisco ACE, Big-IP F5, Riverbed ZXTM and Amazon Elastic Load Balancing. Bluecoat Webfilters. ELB/ALB.

    Clustering with most common clustering tools (Haproxy etc)

Storage and Storage Area Networking

    SANs from HDS, HP, Pillar (Oracle), Coraid, Nexsan and Sunfire/Nexenta (ZFS). All kinds of RAID & Filesystem

Mail/Web/Network/Application Services Administration

    Most MTAs, DNS Servers, etc

Technical Qualifications and Clearances

    2018: DBS **2017:** DBS, BPSS (x2) **2015:** DBS

    2009: Enterasys ECIE-C,ECIE-D,ESE,ESSE-D,DID **2007:** Cisco CCNA **2006:** LogicaCMG Voicemail

    2005: Juniper (Siemens) SDX, SteelBelted (Juniper) Radius, SunOne/Fedora Directory Server, Juniper NSM.

    1999: MCSE, A+

Schooling

    1997-1998: Abbots College, Cape Town, South Africa

    1996-1997: Camps Bay High School, Cape Town, South Africa

    1995-1996: Diocesan College ("Bishops"), Cape Town, South Africa

    1989-1994: Cranleigh Preparatory School, Surrey, United Kingdom

    1987-1988: Franschhoek School, Franschhoek, South Africa

Miscellany

    Nationality: British **Languages:** English and conversational French and Spanish, moderate German and Dutch, some Slavic **Interests:** Music, Foreign Travel, Table Tennis, Snorkeling, Snow Sports, Motorsport, Open source, Statistics, Engineering, Technology, Science, Physics and Astronomy.

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

    IQ: 2020 Per FSIQ 3.0 / Openpsychometrics.org : Full Scale 126, Memory 127, Verbal 133, Spatial 119

    References: Only on request.