Alex Nicholson

#### Personal Details

**Nationality :** British **E-mail :** alexdavidnicholson@gmail.com

**Post Code :** N4 4ED **Mobile :** 07517110739

**Linkedin :** <http://uk.linkedin.com/in/alexdavidnicholson>

#### Education & Qualifications

**Vocational:**

2019 AZ-400 Microsoft Azure DevOps Solutions

2017 Infrastructure Automation – Learn Chef Rally

Self-Study – AWS / AWS CLI, Git, PowerShell DSC

2016 QA Designing Runbook Automation with Microsoft System Center 2012 R2 Orchestrator

2016 M10747 Administering System Center 2012 Configuration Manager

2014 ITIL Foundation V3

2013 MCTS 70-640 Windows Server 2008 Active Directory, Configuring

2012 CompTIA Network+

#### Profile

A **Cloud & DevOps Engineer** with 12+years of experience; including team management, working with a wide spectrum of technologies, most notably PowerShell and scripting, Azure Cloud, Virtualisation, Microsoft Windows Server 2003 – Microsoft Windows Server 2016, Office 365, Firewalls & WAF’s, TCP/IP Networking, Linux and Azure Active Directory. Possesses transferable skills developed on small to large scale projects and working in multiple industries, such as **Marketing, Emergency Services, Banking, Telecommunications, Healthcare and Entertainment**. Expertise involves; technical and operational management, people management, process and automation, maintaining and developing existing networks and migrating complex services

Highly motivated individual, working efficiently both autonomously and within a team. Strives for innovative solutions and improvements utilising existing resources. Looking for a challenging role, automating of services and operations. Working with Azure and AWS.

**Seeks permanent work, available to start november throughout London.**

#### experıence & Skills Summary:

**Cloud / DevOps:** Azure / Office365 / VSTS / Azure DevOps / REST APIs / CI/CD / Micro Services, Service Fabric / Kubernetes / Application Insights / Azure Monitor / WebApps / App Service Plans / Azure Key Vault / Storage Accounts / Azure SQL Server / Traffic Manager / Azure Data Factory / Redis Cache / Virtual Networks / Network Security Groups / ARM Templates / Runbooks / Function Apps / Service Bus / Docker / Containers / WebHooks / Event Hub / Service Principals / GIT / Source Control / SCRUM / Agile / Desired State Configuration

**Languages / Scripting:** Powershell, Batch, VBScript, Python, PHP, HTML/CSS, XML, MySQL, MSSQL, Javascript, Java (Android), .Net, Angular, .Net Core, REST, JSON, XML, DSC

**Operating systems:** Windows Server 2012 R2 / Windows Server 2016 / Windows 7 / Windows 10 / Linux / Debian / RHEL

**Software Packages/Tools:** Exchange 2010 / SQL Server / IIS / Apache / Tomcat / VMware vCentre / VMWare ESX / Hyper-V / MS Project / MS Visio / Watchguard / NMAP / Microsoft SCCM / Microsoft Orchestrator / Microsoft SCOM

**Hardware:** Dell / HP Servers (including blades) / Printers and MFC / Watchguard Firewalls / CISCO ASA / Cisco Catalyst / Avaya

**Other Technologies**: DFS/R, Active Directory, Group Policy, Terminal Services, TCP/IP, DHCP, DNS, WINS, SNMP, ODBC, wireless 802.11*x*, routers, switches and hubs, ISDN, Ethernet, RDP, VNC, VPN, LAN/WAN, RAID, DRAC, iLO, SIP, IP Telephony

References and further employment history available on request

**Employment History**

###### Aug 2017 – Present TLC Marketing Worldwide Ltd, London

*TLC Marketing*operates out of 14 countries, providing integrated sales promotion, reward and incentive campaigns.

Working with top brands worldwide and utilising proprietary in-house technologies for digital campaign delivery.

###### Oct 2018 – Present DevOps Engineer, TLC Marketing Worldwide Ltd

Employed as a **DevOps Engineer** responsible for designing and configuring of the companies DevOps platform and operational processes; working closely with developers to build in-house cloud services; particularly in regards to Build & Release, Release Management and Automation.

**Responsibilities:**

* On-going automation of Operational Tasks
* Automation and Platform Support for in-house developed cloud services
* Development of API Integrations for Cloud Services and 3rd Party SASS solutions
* Development and Design of DevOps and SCRUM practices
* Implementation of CI/CD Pipelines
* Providing Support and Escalation to Technical Operations and Developers
* Design, implementation and support of Azure and Office365 Services
* Configure and Support Azure DevOps (VSTS) Platform
* Design and Implement ARM Templates, Runbooks and Azure Functions
* Maintain Code Repositories and Source Control
* Support and Monitoring of Microservices Platform
* Build and Deployment of Docker and Service Fabric
* Team Mentoring

Some Key Projects:

1. **Design Worldwide Branching and Release Strategy**

* As part of our platform development. A need was identified to design and orchestrate a new branching and release strategy; including full CI/CD to simplify and automate large parts of the software delivery lifecycle.
* This project was initiated and completed by myself; work and design included engaging with the product owner, developers and client services teams.
* Work and design included; creation and management of VSTS projects, CI/CD pipelines and release environments through Powershell and REST Apis. Integration with Azure Runbooks, Functions, Webapps, Keyvaults, service principals, email services, VSTS service hooks, webhooks and others.

1. **End-to-End Automation of Campaign Lifecycle Processes**

* As part of delivering ~350 campaigns a year, operational processes needed to be streamlined and automated to ensure continuous delivery and support Agile development. Work was needed to integrate these processes with Azure DevOps and internal platforms.
* This project was initiated and completed by myself; work and design included engaging with the product owner, developers and operational management.
* Work and design included the deployment of Azure Resources, configuration of SQL and Cosmos Databases, WAF configurations, 3rd party SaaS providers, SSO, Keyvaults and WebApps. VSTS project setup, SSL and DNS purchasing and configuring. The full lifecycle from setup to decommissioning was fully automated.

**Achievements:**

* Reduced Azure running costs by £10,000 PCM, this included re-designing access controls, implementing self-service for resource management and re-architecting infrastructure.
* Reduced campaign running costs by ~£60,000 per year by implementing LetsEncrypt SSL and automating the issuing and renewal processes.
* Winner of the 2018 TLC Frankies Tech Superstar Award.

**Skills Snapshot:** Azure, Office365, PowerShell, Automation, VSTS, Azure DevOps, Visual Studio, REST Apis, CI/CD, SCRUM, .NET Core, Micro Services, Service Fabric, Application Insights, Barracuda WAF, SSL, Angular, Cosmos DB, WebApps, App Service Plans, Azure Key Vault, Storage Accounts, Azure SQL Server, Traffic Manager, DNS, Azure Data Factory, Redis Cache, Virtual Networks, Network Security Groups, ARM Templates, Runbooks, PowerBI, Function Apps, Service Bus, Docker, Containers, SCA, WebHooks.

###### Aug 2017 – Oct 2018                           Senior Infrastructure Engineer, TLC Marketing Worldwide Ltd

Employed as a **Senior Infrastructure Engineer** responsible for providing senior technical operations of in-house, cloud and datacentre services, technical project lead. Working as part of the DevOps team using Agile / SCRUM methodologies and processes.

**Responsibilities:**

* Automation of operational processes using PowerShell and System Centre Orchestrator
* Technical project design and delivery
* Design and Implementation of Office365 & Azure Services
* Migration of On-premises services to Office365 & Azure
* Monitoring and issue resolution through SCSM, SCOM
* Automate the deployment and ongoing configuration of Infrastructure through Desired State Configuration
* Implementation of Hybrid Exchange, Active Directory, Azure Active Directory
* Technical escalation for service desk, operations and development teams.
* Produce and update technical design, operational, infrastructure and support documentation

Some Key Projects:

1. **Automate Patching & Compliance Worldwide**

* Existing patch and compliance processes were heavily reliant on manual operations; affected by worldwide time-zone restrictions and un-reliable data transfer and network services. Re-engineering and automating existing processes reduces failure rates and removes human dependencies and time commitments.
* This project was planned and completed by myself, the key stakeholders were involved in design and testing to ensure the processes met the business needs, inclusive of auditing and security requirements.
* Work included; Automation & Integration of SCCM, SCOM, SCORCH, Active Directory, Exchange, SQL, HP SAN, VMM and PowerShell. Highly available system design, operation and technical documentation and ITIL process application

1. **Build Highly Available Remote Desktop Services (PowerShell DSC)**

* Due to the complexity of maintaining the configuration of the RDS estate, resulting in an error prone environment; there was a need to re-build the entire system using PowerShell DSC (Desired State Configuration) and to implement the infrastructure-as-code with source control via GIT
* I initiated this project; ITIL processes, such as CAB and Change Requests used in planning and agreeing work to ensure risk and design compliance. Infrastructure design was to include multiple levels of redundancy and disaster recovery.
* Work and design included; review of existing setups and configurations. Building new DSC Pull Servers, deployment of new CA Templates, design and testing of new RDS Servers, Connection Brokers, Gateway and Licensing. Highly Available design utilising corporate DMZ.

**Achievements:**

* Design and implemented core business services using Office365 / Azure; including migrating from Exchange 2010, Hybrid Azure Active Directory, Single Sign On (SSO), SSPR and Intune / Hybrid Join. Reduced support requests by ~35% and ensured 99.9% service availability.
* Migrated custom .Net applications to Azure including the integration of Key Vaults, Azure SQL DB, SendGrid, Azure Active Directory SSO, Application Insights and Azure DevOps Build & Release (CI/CD) Pipelines. This enabled for the decommissioning of Datacentre DMZ services, removing 100% of datacentre, hardware and support costs.

**Skills Snapshot:** Microsoft System Centre Suite, Hyper-V, Windows Server 2016, PowerShell, Exchange 2010, EOP, Office365, Azure, SCOM, SCCM, SCORCH, VMM, Microsoft Dynamics CRM, CI / CD, .Net, Azure Active Directory, VSTS, Visual Studio, Application Insights, SQL, ARM, JSON, Rest API, Azure Service Principals.

###### Sept 2014 – May 2017 London Fire Brigade, London

*The London Fire Brigade (LFB*) is one of the largest firefighting and rescue organisations in the world, with around 7000 staff based at over 100 sites and a large fleet of fire appliances they provide [statutory](https://en.wikipedia.org/wiki/Statute) [fire and rescue service](https://en.wikipedia.org/wiki/Fire_department)s for [London](https://en.wikipedia.org/wiki/London).

###### Jan 2016 – May 2017 Technical Support Manager, London Fire Brigade

Employed as a **Technical Support Manager** directly responsible for 4 second line analysts with day to day management of a further 6 1st line analysts. Providing support to 7000 staff using primarily; 10Zig thin clients, Windows 7 and Citrix. Working in an ITIL environment to provide problem management, root cause analysis and continued service improvement. Customer facing service desk.

**My Team** were primarily responsible for providing 1st and 2nd line support to end users, on-boarding and off-boarding for staff including the provisioning of assets, system backups and restores, remote access provisioning, build management and software patching (SCCM), including endpoint protection, resolving server hardware faults and management of print services.

**Responsibilities:**

* Manage and motivate technical staff, allocate work and set priorities
* Ensure technical staff are trained and performance goals are met
* Review and update technical information, processes and procedures
* Provide technical escalation where necessary
* Work closely with problem manager to assist in root cause analysis and resolution
* Develop automation and simplification of operations processes
* Build and improve strong working relationships and communication interdepartmentally
* Work with change and service managers to improve and implement ITIL processes
* Respond to user complaints
* Ensure stock and purchasing are managed effectively
* Day-to-day management of 1st and 2nd line staff
* Increase the teams responsibilities undertaken
* Hiring of permanent and contract staff
* Work closely with department management to improve operating practices

Some Key Projects:

1. **XP Upgrade**

* This project started when Windows XP became EOL. I managed this project with work primarily completed by various team members. The project involved communicating with end users, locating assets, provisioning and decommissioning, build management, purchasing, proving technical workarounds and upgrades, communicating with third party suppliers, stock tracking, resolving complex SCCM application and build problems.

1. **Backup Exec Upgrade**

* This projects goal was to upgrade Backup Exec 12.5 to Backup Exec 2015. I initiated the work to help resolve capacity issues, general backup failures and removal of aging hardware and software. I worked closely with each team member to build the infrastructure and manage capacity and documentation.

**Achievements:**

* Greatly improved the working atmosphere and motivation of the first and second line teams. The key improvements for the team were; improved support and relationship within the department, reduction in complex processes, increased access to technology, training and products and ensuring that we filled vacancies. This resulted in a reduction ~70% calls escalated and an increase in customer satisfaction.
* Built a team from the ground up. Starting with 2 out of 3 vacancies, I developed a new team including project hires and worked to ensure that technical and operational hurdles were resolved allowing them to take on extra responsibility and drastically improving work output.

**Skills Snapshot:** Windows Server 2012, PowerShell, Exchange 2010, Office365, Staff Management, Active Directory, Service Management, Root Cause Analysis, Operational management, SCCM, Backup Exec and ITIL.

###### Sept 2014 – Jan 2016 Infrastructure Design Analyst, London Fire Brigade

Employed as an **Infrastructure Design Analyst** to provide design, development, support and administration to the brigades server environment. A mix of around 70% project and 30% BAU work.

**Responsibilities:**

* Monitoring and issue resolution of large physical and virtual server estate using SCOM, SCCM and HP SIM (HP ProLiant and C-Class Blades)
* Provisioning both Microsoft Hyper-V and VMWare ESX VM’s
* Disaster Recovery planning and management using VMWare Site Recovery Manager
* Support and development of Microsoft Active Directory Services, DNS and DHCP
* Development and management of email services; inclusive of Microsoft Exchange 2003, Microsoft Exchange 2010, Office 365, EOP and Blackberry Enterprise Server
* Server Anti-Virus Control and Management using Trend Micro
* Support and management of Microsoft Server 2003 – Microsoft Server 2012 R2
* Server patch management and deployment using Microsoft SCCM
* Provide escalation support to IT Service Desk support staff
* Provide technical knowledge and advice to third parties, analysing and resolving issues.
* Produce and update technical design, operational, infrastructure and support documentation

Some Key Projects:

1. **Upgrade DNS and Active Directory Infrastructure**

* Due to an error prone DNS infrastructure and a need to prepare the mixed Active Directory Forest for a functional upgrade. I decided to rebuild or decommission all existing domain controllers and to build a new load balanced DNS infrastructure.
* I initiated and completed this project; all work was planned and agreed through various ITIL processes, such as CAB meetings to ensure stability, risk and design were effectively managed. Infrastructure design was to include multiple levels of redundancy and disaster recovery.
* Work and design included; configuring Citrix Netscaler load balanced services across multiple sites; Build and configure new VM and HyperV Domain Controllers, automated and manual reconfiguration of every networked device, mapping of critical services, resolution of errors with SharePoint and SCCM load balancing, testing new infrastructure with critical systems and decommissioning redundant servers.

1. **Automate Leavers Process**

* This projects goal was to consolidate and automate the technical and operational processes associated with staff leaving the brigade. This project improved security and significantly reduced the workload of multiple internal teams and departments.
* This project was planned and completed by myself, the key stakeholders were involved in design and testing to ensure the process worked in sync with existing operational processes, inclusive of auditing and security requirements.
* Overall work included review of existing documentation and operational processes, producing operational, support and technical documentation, development of SQL Reports (MRS) and PowerShell code, integration of multiple Microsoft and 3rd Party SOAP API’s and Microsoft platforms. Testing and stakeholder management.

**Achievements:**

* Worked closely with internal IT Teams to develop and build infrastructure and service management tools, including development of PowerShell scripts. Reduced failure and errors by 100% on a range of processes such as the creation of new users and Microsoft Exchange administration. Provided better security and simplified management with ease of access.
* Highlighted the need to migrate Command Units (CSU’s), worked closely with 3G service provider and internal teams to ensure that all CSU’s were migrated to new infrastructure, with no downtime to operations. This need was highlighted as DMZ infrastructure was being migrated. This work ensured that emergency services could be mobilised effectively and a large risk to public safety was averted.

**Skills Snapshot:** VMWare ESX, HyperV, VM, Windows Server 2012, PowerShell, Exchange 2010, EOP, Office365, Azure, TCP/IP, DNS, Documentation, VPN, Citrix, Active Directory and Cisco.

###### Jan 2012 – June 2014 Barclays Bank PLC (Clearlybusiness Ltd), London

*Clearlybusiness operates as a wholly owned subsidiary of Barclays Bank PLC. They design, develop and support many software and SSAS products aimed at business banking customers – These include products such as Barclays Business Manager, CreditFocus and Barclays Data Service.*

Employed as a **Network and Systems Administrator** to support the existing networks of 200+ nodes, plan, develop and design infrastructure for the future and to maintain the overall security and operating of internal process. Supporting a fast paced developer heavy environment, working to meet constantly changing business needs.

**Responsibilities:**

* Monitoring and resolving issues with automated processes (CRON / SQL Agent / SSIS)
* Mentoring of 1st line support technicians
* Providing 2nd and 3rd line support via email, phone and face-to-face for up-to 60 users
* Managing the provisioning and documentation of hosted exchange and IMAP email services
* Administration of the existing Windows / Linux network, documentation of servers, software patch deployment, server maintenance, renewal of support contracts, monitoring of live systems, monitoring and managing UPS and IDS systems, reviewing of server alerts and other BAU tasks related with Network and Systems administration.
* Supporting existing VMWare ESX clustered hypervisor and SAN infrastructure
* Design and Deploy VMWare ESX networks and Dell SAN
* Supporting existing network infrastructure (Firewalls / Firewall configurations / Layer 3 Switches / Routers / SAN / NAS / ISCSI)
* Working with the team in disaster recovery planning – documenting existing servers, services and helping to prioritise and map the connections between the software and hardware layers and the links with 3rd parties and hosted service providers
* De-commissioning of bespoke server and product builds, consolidating existing software and services
* Working with hosting provider to support SSAS and other products
* Maintaining network security via software update processes, firewall reviews and IDS reporting
* Supporting partners in resolving connectivity and product issues
* Documentation of network and systems, products and operations to aid in change management and planning. The network was mostly undocumented so this was a priority task.
* Asset tracking via Spiceworks to provide a better overview of existing hardware and help in tracking mobile devices such as Ipads and mobile phones
* Managing existing Avaya phone systems, call recording

Some Key Projects:

1. **Shrink /8 TCP/IP network to /25**

* This projects goal was to shrink the existing /8 TCP/IP network to a more manageable size, allowing us to simplify the overall management, increase security, and allow more flexibility when connecting to partners and 3rd parties, easy scanning and to retrofit a structured IP range.
* This project was planned and the workload was carried out by myself, meetings and discussions were had with various stakeholders and 3rd parties where necessary. Project was completed on time. Project plan included key risks, key stakeholders and uptime requirements for critical services.
* Overall work included documenting current configurations, designing the new IP scope and it’s designations, impact assessment of services, communicating with 3rd parties to update VPN links and custom built processes, changing configurations of Windows, Linux and ESX servers, SANs, managed switches and NAS / ISCSI drives. Migrating services between servers, documentation and testing.

**Achievements:**

* Highlighted a need for a more stable and secure automation environment for SSIS and CRON tasks. Successfully designed and built a brand new platform using existing infrastructure. Implemented both technical and operational processes. Allowed better delegation of roles, improved security and stability. Results significantly reduced the amount of time (~25%) required to troubleshoot and manage processes.
* Successful implementation of multiple VPN connections with 3rd parties and partners as a replacement for existing SSH Tunnels. This project came about as a need to fix issues highlighted in a penetration test report. I was assigned this task as I had initially highlighted the issues and had the experience necessary to implement the required changes. Results included better stability and lower support costs.

**Skills Snapshot:** VMWare ESX, Hypervisors, SAN, Windows Server 2008, Linux, VPN, Networking, TCP/IP, Firewall, IDS, Antivirus, Network and Systems management.