

Steve Parker – Linux / Devops Consultant

As a Technical Consultant, I am authoritative on medium and high-end UNIX systems design and configuration. With deep and wide knowledge of operating systems, servers, storage and clusters, as well as LAN, SAN and Virtualisation, I have the knowledge and understanding to propose, design and configure high-end systems within multi-million dollar projects. I bring high levels of professionalism, commitment and attention to detail to every project. I match customer requirements with industry best practices to deliver a design and implementation which provides the best of both.

As solutions do not end with a design, I also have excellent troubleshooting skills to address any issues which may arise later on in the project lifecycle.

UK Government & Defence Security Clearance (SC).

Key Technologies

- Linux/Unix Specialist - design, configuration, performance tuning, hardening.
- Cloud – AWS, Terraform, Azure
- DevOps - Jenkins, Git, Puppet, Terraform, Foreman/Spacewalk/Satellite, Artifactory/Nexus, JFrog, Atlassian
- RedHat Certified Engineer (RHCE) #110-278-421
- Solaris (Solaris 10 SysAdmin, Data Management, and SunCluster Certified Installer certifications)
- Programming - Unix Shell (Bourne Shell, BASH, Ksh, etc), C, and other languages

Recent Successes

- Author of the Wiley book *Shell Scripting: Expert Recipes for Linux, Bash and more* (ISBN 1118024486).
- Created from scratch a Continuous Delivery (CD) system. Hands-off redeployment of test environment via Jenkins: OS reinstalled, servers configured and running the very latest application code within 45 minutes. Also created self-contained image to build hands-off redeployments of other environments, customising each for the variety of High Availability and Performance configurations within each environment.
- Have designed and deployed the Linux strategy and infrastructure for the UK's third largest supermarket, and delivered and supported the first six projects based on that design.
- Created and maintain the [facebook.com/shellscript](https://www.facebook.com/shellscript) page, with over 7,000 followers.
- My shellscript.sh tutorial gets ~35,000 page views per day (10m/year), often #1 in Google for "shell script" and other searches.
- Wrote software to format Sun iRunbook documentation for publication, which reduced a 5-week Write / Format / Review documentation process into a 1-week Write-and-Review process, dramatically increasing the project's profitability.

Work History

Jan 2020 - Present: Senior DevOps Engineer, Thales (Employee)

Providing Linux / DevOps expertise across the Thales Ground Transportation System (GTS) teams and projects. Using Amazon Web Services (AWS) and Microsoft Azure cloud platforms with Terraform and Puppet to automate code builds and tests as well as environment deployments: on-premise, in-cloud and for customer deployment in secured offline environments.

Took the lead role in migrating all of our development and test environments from on-premise VMWare to AWS, liaising with multiple projects to ensure that all aspects of their environment was catered for. I followed this with an extensive task to right-size environments, including designing and implementing facilities for development teams to manage their own infrastructure out-of-hours via Jenkins jobs - providing the facility for individual teams to manage their environments as needed, providing significant cost savings without causing any impact on productivity.

Implementing CI/CD workflows directly in the cloud, automating and scripting creation of containers via CI/CD as well as providing developers with facilities to spin up their own containers as required. Currently working to refactor all environments to run Jenkins controllers and agents in on-demand containers, to achieve significant reductions in annual expenditure.

Jan 2016 – Dec 2019: DevOps Engineer, Thales (Contract, renewed seven times)

Working across multiple projects providing Jenkins, Jira, Git, Gerrit, Artifactory, SonarQube and others for Java, C++, C# and iOS developers for Continuous Integration (CI) and Continuous Delivery (CD). Working with Satellite / Foreman, Katello, Puppet, Vagrant, VirtualBox and VMWare to deliver and manage build environments, developer workstations and other key infrastructure across the projects. Logstash, Filebeat and Topbeat for logging systems using Kibana.

For a London Underground project created a Continuous Delivery system, automatically creating customised deployment servers for each environment, each with different HA configurations for Database, LDAP, Application and Web Front-End, as well as rebuilding the Integration Test environment every night.

Feb 2015 - Jan 2016: Linux Engineer, United Utilities PLC (Contract, renewed once)

Working with Red Hat Satellite 6.0 (Puppet, Foreman, Katello, Pulp, etc) with Red Hat 6 and 7, Git, Kickstart, as well as Solaris 9, 10, 11 and Jumpstart. Creating and defining a new Red Hat VMware commodity platform within the existing Intel (VMware) and Solaris (Physical Servers / Zones / LDOMs) estate. Integrating existing Solaris systems into the Puppet infrastructure.

Using DevOps methods in a traditional Enterprise environment to deliver application-ready virtual machines within 15 minutes, including application-specific customisations where required.

Apr 2014 - Jan 2015: DevOps Engineer, BJSS Ltd (Contract)

For a large NHS project, creating Puppet and Bash scripts to deploy, manage and maintain a large application using a complex combination of Java/Tomcat/Apache/PHP/Redis/PostgreSQL layers, into multiple environments on Red Hat and CentOS. Taking responsibility for coordinating test and deployment activities between management, developers, testers, third-party suppliers and the end customer.

Tune and configure all elements of this stack for performance and resilience, including configuring, testing, building and deploying customised OpenLDAP packages.

Design and build multiple Red Hat High Availability clusters with EnterpriseDB. Deploy and Smoke-Test the application into all Test/Performance environments, as well as in Production and DR environments, on internally-hosted systems, on Rackspace cloud servers, and on the customer's hosting provider's servers. Working with typical DevOps tools such as Git, Maven, Jenkins, Puppet and Bash.

Aug 2013 - Apr 2014: Build Automation Engineer (DevOps), Thales (Contract, renewed 3 times)

DevOps working with Jenkins Continuous Integration, Git, Gerrit, Shell Scripting, JBoss, Apache.

Maintaining the build ecosystem used by many teams of Java developers, and deploying to multiple environments. Installing, maintaining, upgrading and configuring Jenkins CI, Git, Gerrit, Shell scripts, JBoss, Apache, MySQL, GeoWebCache, Artifactory, Sonar and related technologies. Gerrit configuration with OpenID and LDAP. Working with VMWare and Spacewalk (Kickstart) to automate build of RedHat and CentOS servers.

June - July 2013: Linux Specialist, Tesco PLC (Contract)

Linux specialist providing design and strategy for a wide variety of projects on Virtual and Physical platforms. Collaborating with Storage, Network, Database and Application teams on DR, Big Data,

Hadoop, Clustering, Hosting, and other projects.

Dec 2011 - May 2013: Infrastructure Specialist, IBM (Contract, renewed twice)

Unix / Linux Subject Matter Expert on IBM's contract with Department for Work and Pensions. Providing expertise on RedHat Linux 4 and 5, Solaris 9 and 10, AIX 5.2-7.1 and HP-UX 11.31. Working with VMWare, Zones and LDOM, vPAR, LPAR and WPAR virtualisation technologies, on x86, SPARC, Itanium and Power hardware.

Delivering standardised, secure, best-practice builds of Operating Systems and Middleware technologies. Detailed and accurate documentation of requirements and installation procedures. Working with and debugging many versions and combinations of Oracle, DB2, MySQL, WebSphere, Informatica, Siebel, Tomcat, Apache, Samba, Perl, JBoss, and many other technologies, from 10 year old legacy releases to cutting edge configurations.

Defining and documenting infrastructure standards and procedures, from user account creation and management to access control and patch management. Mentoring and training offshore resources in best practices as well as in methodologies for troubleshooting and diagnosing problems. Providing direct assistance with Build and Deployment, Database, Shell, Java and Perl development tasks.

June 2009 - December 2011: Linux Design Consultant, Sainsbury's (Contract, renewed 7 times)

Consultant designing and implementing a Linux infrastructure to follow on from the existing Solaris environment. I used my deep understanding of Solaris and Linux, as well as SAN, Networking, Clustering, Monitoring and Application requirements to deliver a suitable solution for the business. Defining standards, procedures and best practices for design, deployment, resilience (VCS and RAC), storage and backup strategy. Documentation and training for Project, Support and Ops staff to build, use, support and extend the design. Having put all of this into place, I have guided through the next six projects using the standards and procedures provided. Virtualised Linux design using VMWare, as well as a specialised physical build to be rolled out to 200 stores.

Sept 2007 - June 2009: Technical Consultant, iNTEQ Professional Services

For Sun Professional Services, Sun Resellers and other partners, a technical authority providing Enterprise services specialising in design and build of Solaris servers and Clusters, from High-End to Volume Servers, across the Sun range, as well as Storage solutions and Linux systems.

Sept 2005 - Sept 2007: Technical Architect, EDS

Designing Solaris, HP-UX and Linux solutions, quotes, purchase and delivery, installation and configuration of the servers across environments within EDS and Client datacentres. Providing cost models for the deployment and support of the implementation. Working with Unix, SAN and network teams to provide detailed and accurate designs. Acted as the project team's single point-of-contact with technical teams to ensure successful implementation. Analysing application volumetrics and workflow. Taking a close involvement in the change management process.

June 1999 - Sept 2005: Technical Consultant, Sun Microsystems (via Netops, Sun Strategic Partner)

Sun-badged, providing Design, Installation, Configuration and Testing across the full range of Sun Professional Services offerings for Sun Microsystems clients in all markets including Financial, Telco, Retail, Utility and Public Sector. Including Solaris, SunCluster, VxVM, Storage specialisms.

Also responsible for all aspects of Internet presence of Netops and its customers, including determining security policies and procedures, configuring, installing and administrating firewall, web server (Apache,

ModSSL, PHP, MySQL), Sendmail, Exim, Bind DNS.

Sept 1998 - May 1999: Systems Specialist, Datel Computing Ltd

AIX and SCO Systems Specialist responsible for providing consultancy, installation, and ongoing maintenance and support of systems running on RS/6000, NetFinity. Sole company expert in SCO UNIX. Personally responsible for all aspects of the server hardware, operating system, network and networked devices.

May 1997 - Sept 1998: Unix Installations Engineer, Siemens Nixdorf

Unix and networking for Mercedes, Tesco, Dixons. Taking the role of a Senior Engineer, I coordinated 12 engineers replacing the whole network – Unix clients and servers, PCs, printers, and Unix/X11 systems for a Mercedes dealership within one day without disrupting the business.

Feb - May 1997: Support Engineer, GEC Alstom Signalling Ltd

Solaris 2.5.1, Windows NT 4 and Novell NetWare. PCs and Solaris SPARCstations. Administration and maintenance of Internet gateway, ISDN connection, Intranet including Perl CGI scripting, NIS+.

Sept 1996 - Feb 1997: PC Support Technician, Refuge Assurance PLC

On-site support for 600 PC users, Windows / NetWare. Programming of utilities for SCO UnixWare data-entry system. Administration and installation of the NetWare servers.

June 1994 - June 1995: Validation Engineer, ICL (Sandwich Year as part of Degree)

DRS/NX, SCO, UnixWare and Windows NT validation and certification, specialising in Networking - including TCP/IP, OSI, X21, V24/X25, Token Ring, UUCP. Working closely with ICL's Unix developers, I got involved with the Unix development team right down to Kernel level. This gave me a great insight into Unix internals. I also wrote a shell script which turned half a day of test preparation work into a two-minute task.

Education / Qualifications

- Currently studying MSc Computer Science with CyberSecurity with the University of York (part-time, online).
- BSc. 2(i) (Honours) Computer Science, University of Hertfordshire (1996)
- 3 A-Levels in Computer Science, Pure & Applied Mathematics, General Studies (1992)
- 9 GCSEs including "A" in Maths & French, "B" in English Lit. and Language (1989)
- Certified Ethical Hacker (<https://steve-parker.org/cv/ECC-CEH-Certificate.pdf>)
- Red Hat Certified Engineer [110-278-421](https://steve-parker.org/cv/110-278-421)
- Sun Certified Systems Installer for Sun™ Cluster 3.x
- Sun Certified Data Management Engineer - VxVM + SDS
- Sun Certified System Administrator for Solaris 10 OS (Part I & II) - SR1388196

Personal Details

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