# 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) valid to October 2020.

# Key Technologies

* Linux/Unix - design, configuration, performance tuning, hardening. Particularly Linux and Solaris- RedHat Certified Engineer (RHCE), Sun Certified Systems Administrator.
* DevOps - Jenkins, Git, Gerrit, Puppet, Shell, Foreman/Spacewalk/Satellite, Artifactory/Nexus, JFrog, Atlassian product lines.
* RedHat Certified Engineer (RHCE) #110-278-421
* Solaris (Solaris 10 SysAdmin, Data Management, and SunCluster Certified Installer certifications)
* Clustering – Red Hat HA, Veritas Cluster, EnterpriseDB EFM, SunCluster, etc
* Servers - from Blades up to M9000
* Virtualisation - AWS, Terraform, Cloud, VMWare, VirtualBox, Vagrant, Zones, LDOM
* Storage / Volume Management - NAS, DAS, SAN, Veritas, SVM, ZFS, LVM, MD
* Programming - Unix Shell (Bourne Shell, BASH, Ksh, etc), C, and other languages

# Notable Successes

* Author of the Wiley book Shell Scripting: Expert Recipes for Linux, Bash and more (ISBN 1118024486). This book was also included in the hugely popular "[Humble Bundle](http://web.archive.org/web/20190325171123/https://www.humblebundle.com/books/linux-wiley-books)" in March 2019.
* 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 6,700 followers.
* My [shellscript.sh](https://www.shellscript.sh/) tutorial serves around 10 million page views annually, often top 3 in Google results for "shell script" and other search terms.
* Wrote software to format documentation for publication, reducing 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 2016 - Present: DevOps Engineer, Thales (Contract)

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, Amazon Web Services (AWS), Terraform, Vagrant, VirtualBox and VMWare to deliver and manage build environments, developer workstations and other key infrastructure across the projects. Using ELK (elastic.co) 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 Utilites PLC (Contract)

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 Wintel (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)

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)

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 - Dec 2011: Linux Design Consultant, Sainsbury's (Rolling Contract)

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

Working with Unix, SAN and network teams to provide detailed and accurate designs for Solaris, HP-UX and Linux systems. I was the project team's single point-of-contact with technical teams to ensure successful implementation. Analysing application volumetrics and workflow. Closely involved 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 creating security policies and procedures, configuring, installing and administrating firewall, web server (Apache, ModSSL, PHP, MySQL), Sendmail, Exim, Bind DNS for internal systems.

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

AIX and SCO Systems Specialist - consultancy, installation, 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 Alsthom 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

* 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)
* Red Hat Certified Engineer [110-278-421](https://www.redhat.com/wapps/training/certification/verify.html?certNumber=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

# Other Technologies

* AIX, DRS/NX, SCO OpenServer and UnixWare, HPUX, SINIX, \*BSD Unix.
* Unix / Linux Community: Author of the Bourne Shell Scripting Tutorial which is online at <https://www.shellscript.sh/>, normally in the top 3 on most major search engines, as well as many other articles at <https://steve-parker.org/linux/>

# Personal Details

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