

James McDonnell B.Eng.

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SUMMARY

Senior Unix/Linux specialist with experience in sectors such as banking, ISP, hosting, SAAS, retail and telecommunications. Emphasis on enterprise-level systems, storage, backups, virtualization, automation and open source. Able to work at all levels: from architecture, design & performance tuning to day-to-day systems administration. Helpful, enthusiastic and keen to learn new skills.

SKILLS

- **OPERATING SYSTEMS:** Linux (Red Hat, CentOS, Debian, Ubuntu, SuSE), Solaris 9,10, HP-UX 11. Installation, upgrade/patching and systems administration. Also Windows Server AD/RDS management.
- **VIRTUALIZATION:** VMware ESXi, Vshpere/Vcentre, Docker, HP Virtual Connect. Solaris zones and LDOMs, HP-UX HPVMs. Installation and management of large VM farms.
- **DEVOPS:** Git, GitHub, GitLab, Ansible, Kanban, Atlassian/Bitbucket/Confluence, Pingdom, LogicMonitor, Rundeck.
- **AWS:** EC2, RDS, Route 53.
- **NETWORKING:** NFS, NIS, LDAP, NTP, VLANs, 802.1q, Netfilter/iptables/ipset, Samba, WebDav, SSH, TLS certificates, nmap, tcpdump & Wireshark.
- **HARDWARE:** HP Bladesystem 7000 & blades. Sun 6000 blades, 15K/25K, T5000, Sparc and x86/64.
- **LANGUAGES:** Bash, PERL, Python, sed, awk. A little Powershell.
- **STORAGE:** HP EVA fibre channel, HP (Lefthand) P4500 iSCSI, HDS Lightening, Shadowimage, RAID in large multipathed environments.
- **VOLUME MANAGEMENT:** GlusterFS, NFS, ZFS, LVM, SVM and VxVM.
- **SOFTWARE:** LAMP including Apache to version 2.4, MySQL, PHP and Wordpress CMS. Support of Java/JVM web based applications.
- **BACKUPS:** Evault. NetBackup to version 7 including high level architecture, upgrade planning & implementation, throughput tuning, troubleshooting & automation/reporting.
- **MISC:** Rapid Solaris deployment with Jumpstart, JET and flash. HP-UX with Ignite.
- **MISC:** Unix internals and performance tuning.

EDUCATION

B.Eng. Electrical and Electronic Engineering
Awarded Best Student Prize

WORK EXPERIENCE

Micro Focus Ltd (contract, 2 renewals)
Linux Engineer/Designer

Aug 2018 – Present

- Assisted in the architecture, design and implementation of a large scale NIS to Active Directory Migration, covering thousands of machines and users. Working with teams around Europe, created shell, Ansible, Powershell and Perl scripts as required to automate migration tasks, plus LDAP, Kerberos and PAM configurations. Managed code with GitLab and Sharepoint.

- Assisted with the separation of corporate networks and associated projects.

Santander UK Ltd (contract)

Feb 2018 – June 2018

Linux Engineer

- Wrote shell, Ansible and Perl scripts to automate a large scale rationalisation of the client's Unix and Linux landscape, and to collect and prepare data for Kafka. Managed development with GitLab and Confluence. Integrated with Rundeck.
- Assisted with Unix/Linux/Solaris administration.

Lumesse (contract, 5 renewals)

June 2016 – November 2017

Linux Engineer

- Assisted with large VMware to AWS migrations. Wrote Ansible code for rollout and orchestration. Scripted the upload and synchronization of a 25 million file dataset into AWS, verified and reported to the client with Bash, Perl and rsync.
- Built a SAAS infrastructure in AWS, comprising Apache, MySQL RDS, Ubuntu, GlusterFS, Python and GitHub source.
- Managed a large VMware and AWS Linux and Windows infrastructure. Assisted in regular software releases, managed cloud based backups (eVault) and deployed security fixes.

EE (contract, 7 renewals)

April 2013 – November 2015

Unix Systems Administrator/Test Engineer

- Built a virtual infrastructure comprising HP Bladesystem 7000 (Flex10), HP Lefthand iSCSI storage, VMware ESXi 5.1, and Vsphere, hosting Red Hat Linux (RHEL), SuSE, Ubuntu and Windows virtual machines.
- Managed EE's real and virtual server farm, comprising HP blade technologies, ESXi, VLANs and HP EVA SAN storage. Wrote many Bash/Perl scripts to help automate this, including a Perl library to assist with VLAN management.
- Performed many installations of Windows and Linux. Upgraded Linux with Yum and apt-get. Built local repositories for security patching.
- Managed Windows Active Directory accounts and Cisco VPN users. Built numerous Windows servers for Remote Desktop Services, providing secure off site access.

TNT Express (also below)

Sept 2012 – Dec 2012

Unix Systems Administrator

- Administration of Solaris estate for SAP production landscape. Including zones, Veritas VM, Shadowimage SAN-based backups. Hitachi SAN and Netapp NAS storage.
- NetBackup 5.1 to 7.0. Re-designed backups to improve stability and success rate.

Alstom (contract)

April 2012 – Sept 2012

Unix Systems Administrator

- Administration of Linux (Red Hat, SUSE), Solaris and HP-UX estate. VMware/ESX and physical systems. Network management tools such as Nagios, including scripting.
- Redesigned production Solaris zone servers for increased stability.

Hewlett-Packard (contract, 1 renewal)

Aug 2010 – Jan 2012

Unix Systems Administrator

- Architected many small and medium sized virtualization projects, comprising Solaris, Linux, AIX, HP-UX, Windows, HP and EMC Storage, and associated virtual networking.
- Built many virtual machines including Red Hat and Suse Linux, Solaris 10 and HP-UX 11. Devised cloning procedures for fast roll out of HPVMs and LDOMs.
- Provided general systems administration of Sun, HP, AIX and Linux blade systems.

Egg / Citibank (contract, 3 renewals)

June 2009 – Aug 2010

Unix Systems Administrator

- Administration of NetBackup estate utilizing Spectralogic hardware, NetBackup 6.5.1 and RMAN. Resolution of backup BAU issues for compliance with SOX regulations.
- Designed a system of Perl programs reporting on backup utilization, size and churn rates in compliance with SOX (Sarbanes–Oxley).
- Designed and implemented a system for SSH key management and monitoring across about 300 Solaris servers.
- Designed a system of Perl scripts reporting on utilization of Egg's SAN estate, including EMC Clariion and various IBM storage arrays.
- Provided general support of Solaris 6,7,8,9,10 with containers, ZFS.

Tiscali UK Ltd (contract, 1 renewal)

May 2008 – Jan 2009

Backups Architect

- Re-architected Tiscali's corporate backup solution, almost doubling the throughput, while providing increased reliability and rigorous reporting. Presented new architecture to senior management and reported to them throughout the implementation. Technology included NetBackup 5.1, RMAN, 4 backup servers, several NetApp filers and about 200 clients. Also provided NetBackup administration and Unix/Linux/Solaris support.

Phoenix IT Ltd (contract)

Feb 2008 – May 2008

Unix Systems Support

- Provided support for Solaris and Veritas Volume Manager, Veritas Cluster Server, JASS, and NetBackup versions 5.0 to 6.5. Created a Jumpstart server and used it to perform many JET and flash installations of Solaris 8,9 and 10. Built a Veritas Cluster.

TNT Express (contract, 1 renewal, see also below)

Nov 2007 – Feb 2008

Unix Systems Administrator

- Successfully upgraded NetBackup 4.5 to version 5.1 MP6 across a large backup landscape, including a Solaris master server and about 140 clients running Solaris 8,9,10, Windows 2003 and HP-UX, NetBackup for SAP and Hitachi ShadowImage. Documented the upgrade procedures and test plan and performed a comprehensive software audit.

VOCALink (contract)

May 2007 – Aug 2007

Unix Systems Administrator / Storage Administrator

- Provided support of Solaris, Sun 25K, HDS 9980 disk storage, SVM, SSH across different projects. Jumpstarted X86 and Sparc T2000 Sun systems, built (full root) zones and implemented zone backups.

TNT Express (contract, 3 renewals)

July 2006 – May 2007

Unix Systems Administrator

- Working within TNT's global SAP project, provided support of Solaris 8,9 and 10 servers, Solaris zones, Hitachi SAN storage (provisioning), NetApp filers, NetBackup with SAP and ShadowImage for PIT backups, SSH, LDAP, UniQ print server and Veritas Volume Manager.
- Installed and upgraded Java, Websphere, Oracle and Control M/EM. Built Solaris zones on T2000 hardware.

Getronics – Principle Unix Analyst (perm)

Jan 2001 – April 2006

Getronics supplies IT services to the banking, insurance and retail sectors.

- Working as part of a team, supported Getronics' landscape of 250 Solaris, AIX and Linux (Red Hat) servers, disk arrays (Sun, HDS, ESS) and tape libraries. Installed new servers and performed many installations and upgrades of Solaris.
- Assisted in the design, purchase and implementation of a "shared services"

infrastructure, comprising a SunFire 15K server, HDS 9960 disk storage, Brocade fabric, an L700 tape library and many client systems. Created 15K domains. Set up "ShadowImage" backups using Veritas Volume Manager and NetBackup.

- As Service Account Manager for a UK customer, wrote and established service level agreements for existing and new areas of business. Passed in-house ITIL exam.

EDS – Unix Systems Administrator (perm) June 1997 – Jan 2001

- As a member of the EDS Unix team, provided ongoing support to key customers. Built high availability systems using HP-UX, LVM & ServiceGuard clustering.
- Installed and configured many HP "V Class" servers for telecoms billing. Configured EMC luns, logical volumes and performed ADSM recoveries. Implemented a 5 node ServiceGuard cluster using mirrored disks, LAN Fail over, EMC storage and redundant fibre channel connectivity.

Nokia – HP-UX Systems Administrator / Oracle DBA (perm) Sept 1994 – June 1997

- As part of Nokia's Customer Service Team, provided on-going support to UK customers. Working on customer sites, performed many installations & upgrades of HP-UX, Oracle, X.25 and "NMS" software on clustered systems. Installed many HP-UX clusters running ServiceGuard, Oracle and X.25.

Texas Instruments – Software Engineer / Unix Systems Administrator (perm) 1989 - 1994

- Unix Systems Administrator (92-94). Solved and documented hundreds of Unix calls (HP-UX, Apollo, Solaris) and designed the UNIX Email environment using sendmail. Software Engineer (89-92). Provided support for a 'C' translator program used in chip simulation. Developed a problem tracking database in shell script and C.

TRAINING

SunFire 15K Server Administration
SunOS Network Administration
Solaris 2.1 Administration Update
Apollo System Administration
Supporting Windows NT Server 3.5
Accelerated Windows NT 4.0
BMC Patrol Administrator
C Programming Workshop
Programming PERL
Object Oriented Software Design
Time Management
Business Process Management

Hitachi 9960 Disk Array Administration
HP Network Administration
HP-UX 10.0 Transition for 9.0 Admins
HP-UX 10.X MC/ServiceGuard
HP-UX 11.0 Transition for 10.0 Admins
Oracle PL/SQL
Oracle Admin I: Establishing the DB
C++ Programming Workshop
Advanced UNIX Tools Workshop
Software Project Management
Presentation Skills
Team Skills Workshop

Solaris 5 Administration

Communication Skills for IT Professionals

ITIL Foundation

PERSONAL

Driving: Full clean license

Interests: Rowing (2 points), running (club member), travel, reading.