

Maxwell Spangler

maxwell@maxwellspangler.com • (301) 928-7216 • Fort Collins, Colorado • Able to relocate

A passionate, experienced open source focused engineer that balances seasoned technical skills and practical business knowledge with an affable, enthusiastic attitude. I excel at seeing the big picture of computing challenges and then drilling down to overcome obstacles and provide organizations with the results they require.

Technologies

| | |
|-----------------|---|
| Linux: | Red Hat Enterprise Linux (RHEL) [5.x, 6.x], SUSE Enterprise Linux (SLES) (10.x, 11.x), Fedora (1 – 20), CentOS (5.x, 6.x), Ubuntu (10.04 – 13.04), Linux Mint (13-15), Red Hat Linux (3.03 – 9). |
| Other OS: | SCO OpenServer, Unix & Xenix. Microsoft Windows 7, Vista, XP. |
| Virtualization: | Linux KVM, VirtualBox, ProxMox, VMWare ESXi 4.1, Xen (RHEL 5.x, SLES 10.x/11.x, Citrix XenServer, OracleVM 3.x). |
| Linux Software | DNS, DHCP, NFS, NIS, SSH, SCP, SFTP, RSYNC, VNC, FTP, SAMBA (SMB/CIFS), GRUB, ELILO, TFTP, RPM, YUM, APT, Clonezilla, Software Raid (mdadm), Logical Volume Manager (LVM2), Software Encryption (LUKS). |
| Provisioning: | PXE boot (syslinux), Kickstart, Puppet |
| Systems: | Comprehensive understanding of industry standard x86 hardware including high-end servers. HP Integrity Itanium2 IA64. HP Blade Systems (C3000, C7000). HP Superdome SX2000 & SD2. BIOS & UEFI. |
| Networking: | Ethernet (up to 10-gigabit, twisted-pair and fiber). TCP/IP v4 (Layer 2 & 3). VLANs. ProCurve enterprise switches. |
| Storage: | SATA, SAS, Fibre Channel (FC), Fibre Channel over Ethernet (FCOE), SCSI. RAID (hardware & software). HP/Brocade FC Switches. HP SANs (P2000, EVA4400, EVA8000). |
| Design: | Microsoft Visio, Powerpoint. LibreOffice, OpenOffice. HTML, CSS, XML. |
| Documentation: | Microsoft Office, LibreOffice, OpenOffice. Wikis: MediaWiki, FOSWiki, DokuWiki, Confluence. |
| Scripting: | Bash, Kornshell (ksh), Bourne (sh). Progress 4GL. |
| Databases: | Progress RDBMS, SQL. |

Experience

Systems Engineer, Enterprise Linux Systems Platform Testing, Hewlett-Packard

Fort Collins, Colorado, Contractor via OTSI (Overland Park, KS), September 2012 – July 2013

Fort Collins, Colorado, Contractor via VisionIT (Detroit, MI), August 2010 – August 2012

I tested enterprise server platforms running Linux to ensure high quality shipping products. I combined components still under development (hardware, firmware, Linux distributions) and exercised them in order to identify defects. I gathered evidence about defects, submitted detailed reports to triage teams and worked with developers and external partners to isolate and resolve them. When products shipped they were higher quality as a result of my direct efforts.

I provided design, training, administration, and troubleshooting as needed in order to support our lab and as well as teams that shared our lab's equipment, infrastructure and services.

- Designed a web-based test plan management app that enables teams of test engineers to work smarter for increased productivity.
- Created a testing guidebook that defined specific goals for testing and established standards for testing procedures.
- Organized and completed platform testing for an 8-socket server refresh on schedule despite short staffing at HP.
- Designed, built, and deployed a 24-rack test lab within an 800+ rack data center that was successfully used for several years.
- Self-trained as needed in order to learn multiple enterprise technologies such as HP Integrity servers and Fibre Channel.
- Created multiple forms of technical and graphical documentation to increase lab knowledge and quickly educate others.
- Provided remote support for local equipment and services to test and development teams in China and India.
- Deployed Red Hat 6.3 based VM host enabling several teams to operate multiple KVM virtual machine based services.
- Trained other engineers on technologies such as KVM, SR-IOV, VLANs, Ethernet Layer 3 routing, and more, as needed.
- Developed bash scripts enabling routine procedures to be performed quickly and reliably even by novice engineers.
- Built a 160-core, 320-thread, 8 TB RAM x86 Linux server (named “Kraken”) to promote partner SAP's HANA database.

Maxwell Spangler (continued)

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Linux Consultant, Rocky Mountain School of Expeditionary Learning

Denver, Colorado, March 2010 – present

I provide technical services to RMSEL in support of their Linux-based computing environment. I work with a team of four to resolve problems, deploy services, provide on-site and remote support, and maintain a highly effective solution on a limited budget. RMSEL keeps my skills sharp and challenges me to solve difficult problems in an obstacle-filled legacy environment.

- Designed and deployed an 85+ desktop solution running Linux resulting in engaged students and satisfied staff.
- Successfully managed a project to migrate from Vmware to Proxmox (a Linux/QEMU/KVM virtualization environment.)
- Administered Linux VMs providing services to 140+ clients on a Vmware ESXi 4.1 host with 99.5% uptime during school.
- Produced and maintained technical documentation which enabled staff and volunteers to easily solve problems.
- Replaced 100Mbps legacy network with gigabit switches using LACP port aggregation to eliminate network bottlenecks.
- Developed comprehensive security policy to meet Visa PCI standards for credit card processing (implementation in progress.)
- Developed a fault-resistant bash script to suspend, snapshot and backup live VMs enabling reliable full nightly backups.

Manager and Co-Developer, Serena Restaurant and Bar

Research Triangle Park, North Carolina, March 2005 – September 2008

I joined this restaurant start-up project in order to challenge myself and grow my capabilities beyond what I'd mastered in a successful IT career. I learned to perform any role necessary to meet the needs of the business including those requiring me to quickly learn new skills under pressure. This position taught me the importance of leadership and responsibility in business.

- Created complex spreadsheet model to track menu item costs allowing us to focus on high-profit, high-volume menu items.
- Configure point-of-sale system to streamline order entry and allow daily, weekly and monthly monitoring of sales.
- Implemented streamlined inventory and ordering procedures which enabled us to offer fresher food and reduce waste.
- Created professional marketing materials (website, advertisements) [using open source tools] to increase customer volume.

Software Developer, Great Plains Locating Services

Omaha, Nebraska, January 1999 – June 2004

I developed software for GPLS to reliably receive electronic work orders from call centers, apply business rules and deliver them to field staff for completion. I collaborated with end users, directors and top management to analyze business processes and develop improved ways of conducting operations. I then designed, developed, tested, deployed and supported those features in a proprietary application at the heart of GPLS' business. My work directly made this business more competitive on a daily basis.

- Developed software that consistently met expectations for quality and reliability surpassing that of our competitors' systems.
- Used Progress DBA best practices to accommodate significant increases in workloads while limiting the need for new hardware.
- Remotely managed multiple mission-critical Unix systems with relational databases available 24x7x365 with 99% uptime.
- Implemented a sophisticated bonus reporting system that resulted in higher quality and more productive field work.

Software Developer, One Call Concepts, Inc.

Hanover, Maryland, 1993 – November 1998

I developed software for OCC to transform a limited-feature, legacy ticket processing application into an extensible platform which could receive tickets from multiple call centers, track statuses, record work completed and generate client billing invoices. As the sole software developer, I was responsible for the full application development life-cycle from design to support. My successes at OCC were a result of my talents in computing, a dedicated and determined work ethic, and my ability to balance self-directed technical work on my own with team-oriented collaboration to solve problems.

- Developed an ultra-fast search feature using optimized queries to cut search times from 20-40 minutes to less than 1 second.
- Collaborated with end users to design highly efficient data entry processes resulting in streamlined, accurate data capture.
- Solved technical challenges required to implement an interactive voice response (IVR) system on-time and on-budget.