

Scott E. Harney

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Summary

Highly motivated systems engineer with a broad background building and managing 24/7/365 Enterprise and service provider environments with a focus on getting the job done for customers. I am a self starter with a broad and deep understanding of a variety of technologies and how they can best be assembled to support business needs. I can handle multiple simultaneous projects from design through implementation to operational phases.

Technologies

- *Operating Systems:* Linux (Debian/Ubuntu, RedHat, Slackware, SuSe, CoreOS), Solaris 2.51-10, Open Solaris, Cisco IOS & NX-OS, VMWare Server/ESX/ESXi/vSphere 3.x-6.x, Sun Xvm Virtualbox, Xen 3.x, Windows Server 2008-2012R2
- *Server software:* Apache, Tomcat, Qmail, Postfix, Sendmail, Exim, OpenLDAP, SunONE Directory, Lucent QIP, ISC dhcpd, Bind, MySQL, PostresSQL, OpenSSL, OpenSSH, djbdns, Samba, NFS, Snort, Cisco CNR3.5-5.0.11, Nagios, MS Clustering Services, Active Directory, IIS, MSSQL
- *Storage software:* Commvault Simpana 9-11, Legato Networker 7.2.x-8.x, Avamar 3.x-5.x, Netapp OnCommand Suite, Netapp Data OnTap 7.2.x-8.2.x EMC ControlCenter 5.x, EMC Solutions Enabler 6.x, Navisphere 6.24.x, Veritas Command Central 4.3.x, Symmetrix Management Console Hitachi Storage Navigator, HDS Device Manager, Celerra Manager 5.6., Veritas VxVM 3.x-6
- *Cloud Technologies:* AWS, GCE, Docker, Kubernetes, Ansible
- *Network technologies:* ISDN, PPP, MLPPP, DSL, BGP, Frame Relay, VoIP, POP3, IMAP, SMTP, SNMP, DNS, FTP, DHCP, SONET, EIGRP, RIP, IS-IS, Pv6, IPSEC, RADIUS, DOCSIS
- *Programming/Scripting:* Python, PowerShell, Perl, Bourne and C shell scripting, PHP, C, HTML, XML
- *Hardware:*
 - Sun Servers and Workstations including large scale SunFire E20/E25K through all current hardware Sparc, Intel, and AMD.
 - SAN Storage Arrays including all NetApp FAS, e-series and solidfire systems, Nimble CS and AF, Symmetrix-VMAX , Hitachi 9990 & VSP, Clariion/VNX

- Converged/Hyperconverged: NetApp FlexPod, Nutanix
- SAN Switches including Cisco MDS, Brocade 7500 and Brocade 48000 Director
- Direct Attached Storage Arrays from HP, Sun, Dell
- SAN and directed attached tape hardware including StorageTek SL8500, 9310 silo and SL500, STK T10000, STK 9840, and LTO2-5
- Cisco Routers including 120xx, 72xx, 26xx, and 17xx.
- Cisco switches including Catalyst 65xx, 55xx, 35xx, and 29xx and 19xx.
- Intel PC workstations and servers & Macintosh desktops.

Employment

January 2017 - : Consulting Systems Engineer, DCI - RoundTower Technologies

- Consulting Systems Engineer with RoundTower Technologies' Data Center Infrastructure team providing pre- and post- sales expertise and consulting services throughout RoundTower's customer base. My focus areas are Data Center storage and data protection infrastructure.

July 2014 - January 2017: Consulting Engineer - Advanced Systems Group

- Consulting Systems Engineer providing pre-sales support for two Account Managers in New Orleans as well post-sales consulting services and professional services engagements for our customers
- Discover and scope Professional Services and Consulting Services engagements. Produce complete statements of work and proposals for those opportunities and in many cases act as a delivery resource following customer purchase.
- Discover, scope and architect data center software and hardware solutions for customers and prospects. Assist customers in understanding technologies benefits and tradeoffs. Ensure customers have a clear understanding of the business value of these technology solutions.
- Perform detailed storage, data center, virtualization, and data protection health check assessments for customers and prospects.
- Assist multiple customers in creating and completing NetApp storage migrations from legacy 7mode to Clustered Data OnTap. Customers ranged in size from single HA pair systems to multiple data centers resulting in end clusters running multiple NAS and SAN protocols.

- Assist customer in Fiber Channel storage migration leveraging Python and Ansible to automate changes to thousands of objects including FC SAN zones and aliases, WWNs, storage array LUN configuration details, etc.
- Performed a Kubernetes deployment from scratch leveraging Nutanix and CoreOS in lab environment for proof of concept. Used Ansible to automate deployment of Nutanix Acropolis VMs and storage via Nutanix' REST API. Then deployed an autoscaling Kubernetes-managed gitlab application on top of the deployed CoreOS VMs.
- Assist customer with migration from EMC to NetWorker to Commvault Simpana 9 spread across 2 data centers and dozens of remote site locations. Also assist eventual upgrade of environment from Simpana 9 to Simpana 10.
- Performed numerous software and hardware deployments for customers including storage shelf additions, system migrations, DR system readiness tests, etc.
- certifications: NCIE-SAN, Nimble Solutions specialist/NTSP, Nutanix NSEN, Tintri TCSE, Silver Peak TCSE, VEEAM technical sales professional, CommVault CVTSP, Redhat Sales Engineer Specialist - Platform,

February 2006 - July 2014: Systems Engineer IV - SAIC/Leidos corp.

- Team Lead Backup, Recovery, and Archiving engineer, Lead Linux engineer, SAN Storage engineer and UNIX engineer. Provide platform engineering, planning, cost estimation and staff resource planning for Commercial accounts primarily in the Utilities sector
- Replaced Enterprise backup system with Legato NetWorker 7.3 for 700+ Wintel and Unix clients, using tape silos and disk targets at two physical sites connected via WAN. System backs up 70+TB/week and includes Disaster Recovery features. This has been in service for over 7 years.
- Currently engaged in design phase to replace Legato tape backup with Commvault Simpana 10 disk based backups primarily to EMC Isilon scale out NAS.
- Migrated Avamar backup environment for Enterprise Exchange, VMWare and remote sites to replacement Commvault Simpana 9 environment. I designed and implemented the original Avamar environment & its subsequent replacement by Commvault and commodity x86 hardware.
- Migrated 60T+ enterprise NAS from Celerra to Netapp FAS 3270 including data protection and off site DR
- Played a key role in migration of SAP/Oracle environment for Sparc Solaris and HDS hardware to Cisco UCS/Netapp Flexpod on VMWare. This

includes data protection and DR using Netapp suite of software tools for SAP and VMWare.

- Implemented NetApp-based NAS at four remote plants including Legato Networker, DR replication, and SnapLock Enterprise for document retention to meet regulatory requirements
- Implemented NetWorker backup environment integrating SAP, Oracle, and HDS 9990 ShadowImage protecting >50TB of source data and supporting additional DR requirements.
- Performed a successful Disaster Recovery test of SAP environment from bootstrap to running SAP. The previous contract company was not able to complete this so this was our customer's first ever successful DR test of this environment
- Played a key role in moving this SAP/CCS environment from previous contractor site to new customer site including a second move to a new data center within a 1 year period.
- Played a key role in two customer data center moves including planning, engineering and implementation.
- Custom developed scripts to automate activities within the backup environment such as sending tapes for off site storage and managing on and off-site tape inventories.
- Began implementation of Linux infrastructure for customer to seamlessly bring in Linux hosts the Unix team to manage. This included implementation of a Xen and VMWare virtual machines
- Engineering, planning, and implementing transition of monolithic SAN storage from two Symmetrix DMX2 frames to DMX4, to DMX4, Clariion CX3-80, Celerra NS20, Centerra and Avamar.
- Operational support allocating and managing storage from DMX, Clariion, NetApp, and HDS.
- Implemented new web-based documentation system for use by entire Entergy Unix and Storage support team.
- Implemented internal XMPP instant messaging server to facilitate team communications across remote sites.
- Trained team members to use new backup solution including advanced troubleshooting techniques.
- Assisted separate customer BU in backup and recovery audit and in the subsequent of backup policies and archive procedures to meet new regulatory requirements.

April 2004 - February 2006: Contract System/Network Engineer - Diamond Data Systems

- Lead infrastructure engineer for SPAWAR SSC-NOLA . Provide platform engineering, planning, cost estimation, and staff resource planning for current and future projects.
- Critical member of System Administration and Engineering team at SPAWAR SSC-NOLA supporting several U.S. Navy enterprise projects. Duties include platform and network planning and engineering as well as managing System Administrators and Network Engineers.
- Troubleshoot and resolve performance issues in Navy project's production Apache/Jakarta-Tomcat environment. Created monitoring components and trained System Administrators to use them for preventative maintenance and resolving future performance bottlenecks.
- Performance tuning of busy community site consisting of HTTP load balancer, Three Apache/PHP servers, Two backend replicating MySQL servers, and one static http fileserver. Changes made resulted in positive customer satisfaction and increased sales of my client's product.
- Tuning and maintenance of international commercial site including mail server support. Qmail, Spamassassin, antivirus, TMDA employed as part of comprehensive solution for customer support email accounts.
- Installed fault tolerant Fiber Channel and SCSI-attached disk arrays and Solaris 8 Operating Environment to support Navy project.
- Aided development and re-deployment of COOP failover environment for Navy network elements and server infrastructure.
- Implemented Veritas NetBackup across multi-platform environment.
- Implemented Legato Networker across multi-platform environment.
- Implemented network-based mirroring system for "bare-metal" recovery of Windows 2000 servers.
- Performed IBM DB2 database installation and performance tuning for Solaris.
- Implemented Microsoft Clustering Services and Active Directory Services under Windows 2000 to support Navy Project's Siebel-based environment.
- Installed Siebel environment to support testing and eventual production launch of Navy project.
- Performed network security analysis of Navy project's environment
- Troubleshoot and tune Postfix/SpamAssassin/Amavis/ClamAV mail server appliance.

- Developed PHP frontend with MySQL backend to dynamically configure multiple server Apache installation with large number of VirtualHosts.
- Replaced corporate MS Exchange mail system with Solaris and Qmail along with BSD firewall, greatly enhancing security and network performance.

October 2002 - March 2004: Object Technologies Information Specialists

Projects begun under OTIS at SPAWAR SSCNOLA continued after becoming employed by Diamond Data Systems

May 2000 - October 2002: Broadband Services Manager (LA), Charter Communications

- Purchased, built, configured, managed and maintained DOCSIS cable modem ISP in five markets in LA and AL. Managed entire data services launch for Charter in LA going from zero to 15,000 customers in two years
- Budget forecasting and management for all broadband services in LA. Also provided budgetary input for other areas requiring data services engineering expertise.
- Hired, trained, and managed future data network engineering staff in LA DOCSIS markets. Also trained and aided the management of customer support staff and Regional Network Operations Center staff supporting LA and the larger Gulf South region.
- Designed and programmed comprehensive web-based provisioning, customer- and health monitoring software package for Gulf Coast DOCSIS cable modem systems utilizing perl, php, xml, sql, and other technologies. This package provided these services for 10 headends and over 55,000 customers throughout the Gulf South.
- Engineering and support for all Commercial Data Services customers in LA. At the time, Charter did not have infrastructure in place to support commercial customers so we created one in response to demand and to tap an additional revenue stream.
- Created an extensive network monitoring system for Hoover, AL city school system fiber network. Charter inherited this unfunded requirement from the purchase of the Hoover system from AT&T Broadband. Was able to engineer and deliver the solution using surplus equipment resulting in a greatly improved customer relationship and reduced ongoing support costs as we were able to pinpoint and prevent potential problems.
- When @Home threatened to cut off service to customers in Alabama, I planned and performed a midnight switch of Montgomery, AL DOCSIS customers form @Home to Charter HSD with virtually no noticeable

downtime. Also participated in switching the remaining Birmingham, AL @Home COM21. customers to Charter HSD with similar results helping to avert the crisis in Alabama.

- Implemented OC48 transport interconnect between Hammond, LA and Slidell, LA using Cisco Optical networking equipment resulting substantial reduction in data and voice circuit costs across the region.
- Implemented internal SONET OC12 ring utilizing Cisco UBR7246vxr's, 12012, 6509, and 12016 routers and switches.
- Purchased and turned up DS3, T1 & OC12 internet connections throughout the state.
- Installed, configured, and maintained DHCP, DNS, SQL, WWW and mail services.
- Helped maintain Video on Demand servers providing interactive pay per view to over 60,000 customers.
- Implemented network-wide backup and recovery procedure.
- Supported and upgraded fiber-based ethernet network for the City of Slidell government.
- Maintained Unix, NT4, and Windows 2000 servers in 4 cable headends. On call 24/7 for over 100,000 public and private IP addresses.
- Implemented firewalls, Intrusion Detection, and security solutions for servers with direct internet connectivity.
- Served as an authority on all TCP/IP, unix, and other "advanced services" networking issues for all Charter properties in LA.
- Ensured 24/7 personal availability for major network issues throughout LA.
- Planned and implemented the move of broadband services components of 3 digital headend facilities into new master headend facilities.

April 1999 - May 2000: Chief Technical Officer - Fastband, Inc.

- Managed and maintained Internet Service Provider network providing web, mail, DNS and other services.
- Hired, trained, and supervised 24/7 technical support team and network management team.
- Managed secure web servers for processing credit card customer signups.
- Modified RADIUS authentication server to provide SQL database accounting for tracking customer utilization.

- Created and programmed extensive live 24/7 network health monitoring system.
- Installation and maintenance of 24/7 web audio and video streaming services.
- Configured and maintained all remote access servers and routing equipment.
- Implemented network-wide backup and recovery procedure.
- Programmed database conversion utility to transform proprietary database into MSSQL.
- Maintained 32 T1 lines.
- Designed and implemented customer and internal ecommerce solutions.

May 1995 - March 1999: Operations Manager - Blue Grass Distributing

October 1993 - April 1995: Asst. Store Manager - Martin Wine Cellar

Education

- Magna Cum Laude Graduate University of Mississippi, Oxford, MS (1993)
Bachelor of Arts
- Phi Kappa Phi, Omicron Delta Kappa, Golden Key and University of Mississippi Honors Program
- Honors Graduate Brother Martin High School, New Orleans, LA (1989)
- CCNA (2003)
- Siebel training. (2003)
- USENIX/SAGE Member
- Co-founder New Orleans Linux User's Group (1999)

References available upon request