

Charles Wyble System/Network Engineer

charles@knownelement.com

(818)280-7059

Charles Wyble is a systems engineer with 10 years experience in the efficient design, implementation and sustaining of large scale 24x7 production systems across many different industries:

- E-commerce/fulfillment (GSI/The Walt Disney Corporation)
- Social media/social networking (various startups on a contract/consulting basis)
- Payroll processing (Cast & Crew Entertainment Services)
- Hyper local advertising / digital signage (TargetCastNetworks)
- Online display advertising (Evite.com and Fox Audience Network)

Skills Summary

- Core IT infrastructure: KVM/Xen/OpenVZ/Proxmox, Postfix/Exim/Qmail, BIND/PowerDNS, PXE boot/install (Debian (FAI)/RHEL and CentOS Kickstart, Cobbler, OpenLDAP(FreeIPA and standalone)
- Security: IpTables/pfSense/Snort/Nessus/OpenVAS
- Linux Server Applications: Linux shell scripting/automation (bash/sed/awk).
- Web (PHP/Perl/Java/Ruby) application deployment, configuration, tuning, debugging:
- Networking (switches, load balancing, firewalls, routing): BigIP GTM & LTM, Cisco LD, 2600/1800/3600 series routers, 3745/2900/6509 switches, Cisco ASA VPN, Linux Virtual Server (LVS) OpenVPN.
- Monitoring: Nagios, HP OpenView, HP SiteScope, Opsview, OSSIM
- Storage: HP SAN (20 terabytes total storage supporting VmWare workloads), EMC Clarion cx400 and cx700 (200 terabytes total storage supporting Oracle/MySQL/SQL server workloads), Promise and Equallogic iSCSI Network Attached Storage (100 terabytes total storage supporting near line storage and development workloads) NFS/rsync/git on Linux supporting distributed web work loads.

Specialties

- Large scale transaction processing (ecommerce/ad delivery) system design and implementation.
- PCI Compliance (including the largest compliance project at the Walt Disney Company)
- Large scale web application operations/hosting (HostGator.com)

Experience

Co founder and Chief Technology Officer at Free Network Foundation

May 2011 - Present

The Free Network Foundation is a nonprofit organization that provides operators around the world with essential infrastructure for the realization and support of free networks. We engineer tools and develop educational resources to facilitate the deployment of resilient, responsive, and accessible networks.

- Deployed core IT systems (Highly available pfSense router/Cisco switches, Dell server with LXC virtualization backed to FreeNAS for storage), OpenQRM to handle VM provisioning
- Deployed backup and disaster recovery systems
- Implemented monitoring/alerting/event correlation (using AlienVault (OSSIM))
- Implemented numerous web based software packages to support core business operations: Chili (Redmine fork), StatusNET, CiviCRM, Elgg/Lorea, MediaWiki, Kaltura,Dolibar,phpMyFAQ,Wordpress and more

Founder at Known Element Enterprises

January 2002 - Present

A professional services organization that has been providing systems and network engineering expertise to organizations since 2002.

Some work we have conducted:

- LAMP Deployment Deployed a Debian Linux/Apache/MySQL/PHP system and educated the System Administration and Development staff on configuration and use for an insurance company.
- Corporate Linux Deployment/Migration Provided assistance to a medium sized engineering firm with a near 100% conversion to Linux on the desktop and server. Utilizing SUSE Professional 6.5 for desktops and Debian GNU/Linux for servers (Email/File Server/DNS/DHCP).
- Linux Deployment/Migration Provided assistance to a small software development firm with a near 100% conversion to Linux.
- Utilized Ubuntu Linux for desktops and Debian GNU/Linux for servers (Email/File/LDAP/DNS/DHCP).
- Windows IT / end user support. Provided desktop/server installation,support and optimization.
- Adjunct system administration support for development teams. Provided senior level system administration/engineering/architecture support to various startup development teams on a contract/consulting basis.

Linux System Administrator at Hostgator.com

March 2011 - May 2012 (1 year 3 months)

- Provided senior level Linux and web application support to a global customer base.
- Handled internal escalations from Jr and Level I administrators.
- Developed standardized reply language, scripts and procedures for numerous common scenarios. This greatly reduced errors across the Level I Linux administrator department.
- Handled customer service issues for numerous managers and directors.

Network Engineer at Fox Audience Network

March 2010 - September 2010

Provided expertise in the areas of data center network design and large scale Linux system implementation.

Linux/Windows/MacOSX Systems Engineer at RippleTV

October 2008 - January 2010

Provided system engineering expertise for customer facing advertising platform (AdSpot) and internal fleet management tool (CPanel). Utilized Nginx, Mongrel, Thin, Rails, Merb, Rack, MySQL (with replication), memcached and slack to support 2000+ systems.

Linux System Engineer at Evite

June 2008 - September 2008

Provided Linux and Cisco systems engineering expertise for Evite.com, across 2 geographically dispersed data centers supporting 10 million visitors and 2 million e-mails per day. Utilized Apache/Tomcat on Gentoo and Ubuntu

Linux System Engineer at Cast & Crew Entertainment Services

March 2008 – June 2008

Linux system engineer. Oversaw 100 Linux servers running Java and C based systems.

Linux Systems Engineer at Siderean Software

September 2007 - February 2008

Provided Linux systems engineering expertise for Siderean Software. Utilized Fedora and Centos on dedicated hardware and ec2 to host numerous web properties including sites for Oracle Software.

Linux/Windows Systems Engineer at Walt Disney Internet Group

August 2006 - September 2007

A highly dynamic environment that allows me to work on several of the worlds most popular web/ecommerce sites. I perform design and architecture as well as day to day administration of disneyworld.com disneyland.com and several other Disney park property sites.

Provided system engineering and PCI compliance expertise for Disneyland.com, Disneyworld.com, DisneyCruiseLines.com and 23 related properties generating 2 billion dollars a year. Business logic was handled by Jboss instances on RHEL3/4 and frontend application serving was done via Windows 2003 and Tomcat/IIS.

- Automated numerous routine system administration tasks Created numerous batch and VbScript programs to handle all aspects of Windows administration from the command line.
- Active Directory Project for WDIG Designed and implemented a nation wide, 3 data center, highly available Active Directory system to handle both the PCI and non PCI servers for the Walt Disney Internet Group.
- Windows NT to Active Directory migration Migrated all the application servers off of Windows NT to Windows 2003 Active Directory domain controllers. Also have experience with Windows 2008 (including Linux/Cisco/wireless [wpa2 enterprise] authentication). Used both Centrify and Samba/Winbind/LDAP/Kerberos.

Linux System Engineer at Intuit

2005 - 2006 (1 year)

Linux systems engineer for a 24x7 transaction processing/ecommerce/ financial services environment. Responsibilities included working closely with the network administration and infrastructure design teams and ensuring continuous uptime of multiple high visibility/high impact/high value environments including 1TB MySQL database, 300 TB Oracle database, 1.5 TB Oracle Data warehouse and a 4,000-store LAMP based ecommerce system (MerchantAmerica.com).

Projects:

- Deployment of encrypted backups. Designed/tested/documentated/deployed an enterprise wide Linux backup system. All data stored on a central server with ISCSI attached network storage. Uses GNUPG and tar over ssh. Backups/Restores tested on a weekly basis.
- Deployment of Oracle database infrastructure. Deployed 2 Oracle RAC clusters, each consisting of 3 Dell 6850's. They are equipped with Qual Dual Core Xeon's and 32 Gb of RAM, running RedHat Enterprise Linux 4.0 64bit edition. One environment is for staging and one is for production. EMC attached. This environment is used for Data Warehouse, Transaction Processing Software and Credit Card Clearing applications. The hardware and software was deployed in 3 business days.
- File Integrity Checking system for PCI compliance. Deployment of file integrity checking across 100 UNIX servers using fully open source software. Used integrit <http://integrit.sf.net> and some custom shell scripts which were submitted back upstream for inclusion.

Linux/Windows Systems Engineer at GSI Commerce (now an Ebay company) March 2002 - February 2005

- Disaster Recovery from an Informix Database failure. Assisted in the design/testing/and execution of a disaster recovery in real time (on-the-fly). Wrote and documented the use of several utilities that cut down the amount of time to recovery by 30 percent.
- Streamlined the FTP Server Configuration process. Streamlined the system configuration and new account creation process for ProFTPD on a mission critical FTP server. This allowed faster turn around times and freed up IT resources.
- Deployed open-source Remote Control Software. Deployed/Secured/Optimized/Maintained UltraVNC remote control software. This allowed the Infrastructure Support team to more rapidly respond to users support requests, and by doing so increase compliance with Service Level Agreements and increase end-user satisfaction.
- Network Infrastructure Upgrade. Upgraded the network from hubs to Linksys managed switches to increase network performance and usability/reliability. No network downtime occurred in the process of the upgrade.
- Hardware/Software Inventory Solution: Wrote a custom software/hardware monitoring/reporting system to ensure compliance with software licensing and obtain an accurate overview of company assets for inventory and disaster recovery purposes. Utilized WMI/Visio/Microsoft Access.