

Lucas Peet

Summary

- Demonstrated ability to continue to learn and master new technologies and increase expertise.
- Displays extensive troubleshooting skills and a logical thought path to solve problems efficiently and quickly.
- Pays strong attention to detail, which is required in all areas of network engineering.
- Possesses the agility to apply extensive knowledge of networking to adapt to unfamiliar devices.
- Exhibits detailed knowledge on the configuration of network devices including routers, firewalls, switches, and wireless access points and bridges.
- Willingness and ability to do what it takes to get the job done with the desired outcome, even with tight deadlines.

Career History & Accomplishments

Sr. Performance Engineer, *Interactive Data 7ticks*

2011-Dec 2013

- Daily duties included troubleshooting performance and network related issues such as L3 routing/BGP issues, path redundancy issues, and exchange related problems.
- Worked with customers to find root cause of latency and packet loss issues using packet capture and analysis with tcpdump, Wireshark, Riverbed Pilot, and Corvil.
- Performed multicast stream analysis to identify gaps in market data; identified incorrect multicast paths which caused additional market data latency.
- Performed TCP analysis to determine RTT latency, TCP order/ack/fill latency, and determining the source of packet loss resulting in TCP retransmissions.
- Monitored circuits for capacity planning and latency measurements to verify carrier reported latencies.
- Assisted customers in troubleshooting FPGA cards displaying frequent disconnects, compatibility, and latency issues.
- Assisted the Server Admins team with Windows Server 2008 R2 and Linux (RHEL, CentOS) connectivity and performance troubleshooting.

- Major projects included a global monitoring and capturing initiative using Corvil for measurement and Riverbed appliances for ad-hoc capture and troubleshooting.
- Deployed aggregation switches for capturing and monitoring using Arista and Netscout (Simena / Onpath) devices; placed optical taps on circuits and attached individual switches into aggregation switches to support SPAN sessions for ad-hoc visibility.
- Configured Corvils by building channels for market data feeds, latency measurements, and order analysis.
- Designed and deployed isolated PTP environments for nanosecond precision, low latency time; NTP mesh between geographically local GPS time sources for redundancy in the event of GPS signal loss.

- Wrote tools in C to greatly speed up .pcap analysis for market data gap detection.
- Wrote various other tools/scripts to assist in other daily tasks.

Network Engineer, Eagle 7 Trading, LLC

2009-2011

- Responsible for the design and maintenance of a global high frequency trading network, including configuration of Cisco switches and routers for high speed, low latency connectivity to major financial exchanges.
- Configured network interfaces for connectivity to financial exchanges, including routing using BGP, multicast configuration and other exchange requirements.
- Configured ACLs on switches to filter routes, traffic, and multicast across multiple uplinks.
- Built NATs as required and adjusted routes as needed for proper connectivity across multiple environments, including using GRE and IPSEC tunnels to connect to multicast and certification resources when a direct connection was not possible.
- Implemented optical taps at the datacenter for packet capture servers to analyze traffic patterns and latency issues.
- Utilized troubleshooting skills including analysis of captured packets to determine the cause of various issues, including those caused by software or problems originating outside of our network; assisted software engineers in resolving network related issues with their code.
- Developed an NTP graphing and monitoring application in Python to ensure accurate NTP time across all network switches and routers.
- Installed a network monitoring solution for alerts to network issues; set up a central syslog server for network devices, including a web-based log viewer to monitor system events in real-time.
- Administered the Windows Active Directory network environment, along with Exchange 2007 and Microsoft Sharepoint, including applying updates and service packs as needed. Performed migration of Sharepoint 2007 to Sharepoint 2010.
- Administered the Team Foundation Server farm, including migrating from TFS 2005 to TFS 2010, and setting up build servers with multiple nodes.
- Implemented server backup solution using Symantec BackupExec to ensure safety and integrity of company IP.

Senior Network Administrator, Velociti, Inc.

2004-2008

- Responsible for the support and maintenance of all company servers and Cisco network infrastructure.
- Saved the company thousands of dollars by setting up site to site VPNs using Cisco PIX and ASA devices to replace the expensive point-to-point Frame Relay system.
- Implemented secure Client VPN access with ease of administration using RADIUS and Active Directory for authentication and management.
- Designed and administered the corporate email system, including anti-spam and anti-virus technologies.
- Rebuilt and redesigned the Windows 2003 Server Active Directory for redundancy and optimum connectivity.
- Developed an internal Intranet for IT that included web based utilities to ease administration, monitoring, and a knowledge base on a LAMP platform.
- Maintained Internet domain names and hosts, including management of remote and local DNS servers, and administration of IIS on Windows Server 2003.

Network Engineer, *Velociti, Inc.*

2003-2004

- Configured customer networks, including implementation of VLANs, to support new wireless infrastructure using Cisco and Motorola (Symbol) wireless switches, access points, and devices.
- Secured customer wireless networks to match their current network policy and increased the security of wireless access by using WPA2 and 802.1X authentication with RADIUS for Enterprise Class wireless security.
- Surveyed for, designed, and installed small and large 802.11a/b/g wireless networks for customers, including Fortune 500 companies. Deployments ranged from 2-3 access points and a few devices to nearly 100 access points and hundreds of devices.

Freelance Consultant, *Lucastek*

2003

- Installed and configured Linux based servers for various clients and uses, including web servers, firewalls, DHCP servers and Windows compatible file servers.
- Designed a Linux based email hosting solution for virtual domains, using Postfix and Courier, with a MySQL database backend. This made it easy to administer email domains and accounts, while maintaining security and scalability.
- Completely redesigned a customer's internal network which was using live, routable IP addresses to use a subnet scheme reserved for internal networks. This drastically increased security and freed up their routable Class C subnet for use on internet-facing servers and a larger NAT pool.

Systems Engineer III, *Sprint PCS*

2001-2002

- Administered the SprintPCS.com website, including all J2EE web-based applications on 200+ production and development UNIX servers running Solaris with Bea WebLogic and Sun's IPlanet web server.
- Wrote shell and Perl scripts to ease and automate administrative tasks across multiple servers.
- Provided 24/7 support for the website to maintain maximum application availability to SprintPCS customers.
- Participated in the development of internal knowledge base and web based utilities using PHP and MySQL.

- Certifications
- Corvil Certified Performance Management Expert
 - Cisco Certified CCNA
 - CompTIA A+ Certified

- Education
- Grundy Area Vocational Center**
Computer Maintenance and Technology, *Morris, IL*
- Canton High School**
High School Diploma, *Canton, IL*