

Thomas Noonan II

CONTACT INFORMATION

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CERTIFICATIONS

- Red Hat Certified System Engineer for Red Hat Enterprise Linux 6

VIRTUALIZATION AND CONTAINERIZATION EXPERIENCE

- Comfortable Docker and OpenVZ containers.
- Experienced deploying applications within Docker.
- Skilled administering virtual machines in both VMware vSphere and Oracle VirtualBox environments.
- Experienced installing and maintaining high-availability VMware vSphere 5 clusters utilizing shared storage.
- Experienced with RackSpace Openstack based cloud servers and APIs.

SERVER SOFTWARE EXPERIENCE

- Experienced with a wide range of open source utilities including Samba, Apache, MySQL, Bind, Exim, Asterisk, OpenVPN, Squid, Nagios, Asterisk, ISC DHCPd, NFS, RSync, OpenLDAP, and Bacula.
- Comfortable with Apache and Nginx web hosting configurations.
- Experienced with Red Hat Cluster Suite.
- Versed in Linux package management utilities such as Yum, Apt, and Portage including creating custom packages.
- Experienced administering production servers.
- Versed in Nagios system monitoring software.

CONFIGURATION MANAGEMENT SOFTWARE EXPERIENCE

- Experienced with Puppet server and client configurations.
- Comfortable writing Puppet modules and manifests as well as Chef cookbooks.
- Versed in using Puppet and Chef for infrastructure control and automation in small (under 100 clients) environments.
- Experienced with Chef utilities, clients, as well as Hosted and local Chef servers.

SERVER HARDWARE EXPERIENCE

- Experienced administering servers using HP Onboard Administrators, HP iLO management processors, Dell DRACs, EFI environments, and standard BIOSes.
- Proficient with HP Superdome 2 platforms, HP blade servers, and standard 1 and 2U x86 and x86_64 servers.

LINUX OPERATING SYSTEMS

- Over 10 years of Linux experience as an administrator, programmer, and user.
- Experienced with Gentoo, Debian, CentOS, Ubuntu, and Red Hat Enterprise Linux.
- Expert at administering Linux at the command line and administering headless servers.

PROGRAMMING AND SCRIPTING EXPERIENCE

- Versed in C, Ruby, and PHP programming as well as BASH, Python, and TCL scripting.
- Experienced writing test scripts in TCL utilizing expect to control command line interfaces.
- Experienced with PHP based web applications utilizing MySQL databases.
- Skilled at Ruby programming for use with configuration management templates.
- Proficient with RESTful APIs in Python and Ruby.
- Comfortable with git version control tools as well as GitHub work flows.

NETWORKING EXPERIENCE

- Comfortable with standard network protocols at the packet level.
- Skilled at using traffic analyzers to determine network issues as well as to create appropriate firewall configurations.
- Knowledgeable with configuration and implementation of Linux network environments, including Linux IP tables firewalls and 802.1Q vlanning.
- Experienced configuring HP Procurve switches, Brocade switches, H3C switches, and HP Virtual Connect Ethernet modules.
- Expert at using PXE to boot machines which do not have boot disks.

SAN EXPERIENCE

- Experienced administering Fibre Channel SANs with multiple paths, hosts, switches, and controllers.
- Proficient with Linux multi-pathing tools including multipathd.
- Experienced configuring HP MSA and EVA storage controllers and Brocade Fibre Channel switches.
- Experienced configuring Brocade Fibre Channel over Ethernet (FCoE) switches, H3C FCoE switches, and Procurve CEE pass-through interconnects using DCBX and 802.1P QoS routing.

ABRIDGED
EMPLOYMENT,
EDUCATION, AND
EXPERIENCE
HISTORY

- **Tek Systems, contracted to Comcast June 2014 to May 2015:** Senior Linux Engineer in the Technology and Product division of Comcast. Administered, maintained, supported, and improved the Video On Demand transcode and distribution services of Comcast Wholesale. Maintained Linux servers running in house developed applications utilizing Tomcat and Oracle. Programmed applications in Python and Ruby to solve operational issues faced by the Ops team. Utilized Flask-Restful to implement REST APIs within Python to interconnect applications and provide middle tier services interfacing with MySQL, PostgreSQL, and Oracle databases. Implemented Docker and Puppet based workflows for application deployment allowing for application environment synchronization, simple deployments, and easy application rollback. Standardized server configurations using Puppet. Utilized Agile development practices for both development and operational tasks.
- **Roosevelt High School Cyber Patriot Program (Volunteer), January 2013 to June 2014:** Volunteer system administrator and instructor for the Roosevelt High School Cyber Patriot Program. Instructed students on network theory, Linux use and administration, and system security. Administered infrastructure for the program to allow the students to practice with malware and black-hat software in a controlled environment. Managed routers, Puppet and Chef configuration management servers, SSH and Samba bastion servers, local Yum servers, as well as general network infrastructure servers. Also managed an OpenVZ sandbox environment for classroom use which allowed students rapid access to a Linux sandbox as root, while not allowing them to interfere with other students. Utilized VMware virtualization to host the Cyber Patriot environment.
- **RackSpace Hosting, October 2012 to May 2014:**
 - **DevOps Engineer in the SMB Unit of RackSpace Hosting:** Configured and administered customer environments via Chef configuration management tools. Developed Chef cookbooks to provide general and extensible application management cookbooks to highly tailored cookbooks to configure a customer's application. Utilized continuous integration tools and automated test suites to maintain cookbook code quality. Collaborated with other engineers and customers on shared code bases using git and GitHub for version control. Worked with other engineers and management to set code quality standards, best practices, and team procedures. Provided system administration support to customers with immediate response times to site and server issues.
 - **Enterprise System Administrator in the Enterprise Unit of RackSpace Hosting:** Administered, triaged, and repaired high profile web and database servers hosted at RackSpace. Configured all operating system aspects of customer servers, including disks, kernel tuning, package management and patching, firewalls, and software configuration. Troubleshot servers both in real time and after the fact to determine causes of site outages and performance issues. Used Python and Bash scripts to characterize server behavior to advise on performance issues. Advised customers on high availability configurations such as Red Hat Cluster Services, Multi-Master MySQL, load balancing, and horizontal scaling using both dedicated gear and public cloud. Offered front line support to customers with immediate response times to site and server issues.
- **Randstad Staffing (formerly Spherion Staffing), contracted to Hewlett-Packard December 2009 to September 2012:** Enterprise Server Technician and System Administrator for HP's Enterprise Server Lab. Administered, configured, assembled, triaged, and repaired HP's line of flagship servers. Supported HP's engineering and firmware teams by maintaining server prototypes, lab infrastructure, and test scripts. Administered approximately 50-100 infrastructure servers on both real hardware and virtualized platforms ranging from low visibility test servers to production servers visible to multiple business units within HP. Assisted with network support including general maintenance, outage triage, and firewall configuration.
- **Green Ride Colorado, September 2009 to December 2009:** Programmer, system administrator, reservation agent, dispatcher, and IT agent for Green Ride Airport Shuttle. Originally hired as a dispatcher and customer service agent, the position grew to building and maintaining PHP based driver manifest tools to streamline the dispatching process. Maintained Linux servers to host manifest tools. Managed driver scheduling and support for the airport shuttle as well as phone support for shuttle customers.
- **Iowa State University, 2003-2006:** Worked towards a Bachelors Degree in Computer Engineering. Studied computer programming, electronics, and embedded programming.