

# Erik W. Niklas

Linux System Engineer

Courtenay, BC, Canada  
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## Professional Summary

- Over nineteen years of experience with Linux and Unix systems
- Develops and promotes relationships of trust and respect with peers, customers, and superiors
- Excellent written and oral communication skills; actively documents and shares knowledge
- Dual US and Canadian citizenship

## Technical Skills Summary

**Operating Systems:** Highly competent in Linux system administration (Red Hat/CentOS, Ubuntu, Slackware). Intermediate knowledge of Windows operating systems

**Scripting/Programming:** Thorough experience with Python, Perl and bash shell scripting; significant experience with C/C++/C#

**Utilities/Applications:** In-depth knowledge of Puppet, OpenVPN, KVM/libvirt, VMware, Xen, VirtualBox, NFS, DNS/BIND, LDAP, Samba, Apache, Kickstart. Intermediate knowledge of git, Subversion, Expect, sendmail, Postfix, MySQL, Cassandra, and Oracle Applications and databases

**Cloud services:** AWS VPC, IAM, Route53, ELB, S3, Lambda, Terraform

**Protocols:** Knowledge of common protocols: TCP/IP, UDP, DHCP, NTP, ICMP, TFTP, ARP/RARP, BOOTP, PXE, POP, IMAP, SMTP, HTTP

**Administrative:** Excellent troubleshooting and logic skills  
Outstanding writing and communication skills  
Highly security-conscious and proactive  
Fast learner, self-motivated and highly interested in Unix/Linux administration and DevOps practices

Able to operate in a lead role; good leadership and interpersonal skills  
Able to prioritize projects and work well in a group or alone  
Experience hardening servers in response to Sarbanes-Oxley legislation  
Experience with change control processes and ITIL

## Experience

*System Engineer, Demonware, December 2015 - November 2017*

### **Job Responsibilities**

- Support AWS infrastructure across multiple accounts (IAM, VPC, Route53, Lambda, S3) using Terraform
- Educate other teams on AWS best practices and provide support
- Primary owner of DNS for entire organization
- Primary owner of network storage (NetApp)
- Support of OpenNebula for VM provisioning

### **Special Accomplishments**

- Led a major project to replace legacy storage (NetApp) with a more cost effective and performant solution
- Created a structure of multiple AWS accounts to empower teams and provide per-team billing data
- Used AWS Lambda to automatically tag resources in a legacy account for billing purposes and delete unused resources, resulting in significant cost savings

*Service Reliability Engineer, Demonware, February 2012 - December 2015*

### **Job Responsibilities**

- Ensure network service availability for hundreds of game titles, including some of the most popular games in the world, serving millions of concurrent users and hundreds of thousands of requests per second
- Provide senior system administration support for thousands of CentOS Linux servers across several data centers around the world
- Secondary support for Cloudera/Apache Hadoop clusters used for data warehousing
- Support for two Cassandra clusters
- Primary support for many NetApp storage filers
- Some maintenance and administration of MySQL databases
- Maintenance and development of Puppet modules for configuration management
- Development and maintenance of Python scripts and automation tools
- Involved in deployment of several new data centers overseas
- Migration of services to AWS
- Primary owner of DNS infrastructure and internal package repositories
- Maintenance and support of ESX and KVM virtual machines and hypervisors

- Mentor junior system administrators

### **Special Accomplishments**

- Had a significant role in expanding the business into China
- Had a major role in the deployment of services across hundreds of machines for several of the world's largest title releases
- Overhauled internal DNS infrastructure with no downtime
- Ran a bash scripting workshop for junior administrators
- Wrote Python scripts to provision and free up servers with a single command, saving a massive amount of time for SREs and system administrators

*Linux System Administrator, Oracle Corporation Canada, January 2005 - February 2012*

### **Job Responsibilities**

- Provide consulting services to outside companies, including configuration of DNS, mail, backups, Kickstart, and general system administration and troubleshooting
- Perform senior system administration support for 400+ Sun Solaris, Oracle Enterprise Linux, Red Hat Linux, and Windows 2003, 2008 and XP servers (both physical and virtual)
- Develop new solutions as part of an infrastructure team
- Develop and maintain scripts to simplify administration and automate processes
- Develop, maintain, and support VMware, Xen, and Amazon EC2 (AMI) virtual machine images
- Maintain and improve infrastructure to support hundreds of Unix and Windows servers, both internal and for customer projects
- Provide periodic on-call support

### **Special Accomplishments**

- Developed and maintained VMware, Xen, and Amazon EC2 images of Red Hat Linux, Oracle Enterprise Linux, Windows XP, Windows 2003, Windows 2008, and Oracle 9i, 10g, and 11g RAC deployed thousands of times for sandbox, development, and production use, requiring minimal administrator interaction
- Wrote scripts to automate configuration of Linux servers across multiple data centers
- Contributed a vast amount of quality documentation describing internal processes, best practices, tips, and procedures

*Unix System Administrator, Nationwide Insurance, March 1999 - December 2004*

### **Job Responsibilities**

- Install, upgrade, and administer 650+ Unix servers in two data centers, including Solaris, HP-UX, AIX, and Linux
- Write scripts to automate tasks and ease administration
- Maintain a set of Perl utilities allowing front line support to administer user accounts
- Serve as postmaster for a sendmail server supporting 1000 users
- Responsible for periodic on-call support
- Keep skills current by reading periodicals, books and web sites pertinent to the field, and by attending regular training and conferences

- Decide upon and document best practices
- Review and improve security templates
- Mentor junior system administrators

### **Special Accomplishments**

- Wrote a suite of tools to implement password security mechanisms in an NIS environment
- Proved that Linux is a viable alternative in the existing Unix environment
- Designed and implemented the Linux solution
- Created tools to migrate existing DNS zones to a new DNS infrastructure with minimal customer impact
- Migrated central sendmail server to Postfix
- Wrote many authoritative documents, including one used by the entire team to upgrade several hundred servers from Solaris 2.6 to Solaris 8
- Assumed a lead role among a group of sixteen peers

### *Intern in Unix System Administration, Nationwide Insurance, February 1998 - March 1999*

- Monitor, maintain, and upgrade many systems, including Solaris, HP-UX, AIX, and DEC Ultrix
- Address customer requests for system modifications and installations
- Help patch and certify several hundred servers for Y2K compliance
- Write a program to allow endusers to safely shut down and reboot workstations

## **Education**

*Bachelor of Science in Computer Science and Engineering, The Ohio State University, August 2000*

## **Professional Development**

- HashiConf 2017
- AWS re:Invent 2016
- Usenix LISA conference 1999-2002, 2006, 2007, 2009, and 2012
- LinuxCon 2011
- Percona/MySQL training
- Hadoop and Cassandra training
- AWS SysOps training
- Puppet training

References provided upon request.