Erik Niklas

Infrastructure Tools Engineer

Courtenay, BC, Canada
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Professional Summary

- Over 25 years experience with Linux and Unix systems
- Over ten years experience running large distributed systems
- Passion for automating processes and building tools to maximize team productivity
- Develops and promotes relationships of trust and respect with peers, customers, and superiors
- Excellent written and oral communication skills; actively documents and shares knowledge
- US and Canadian citizenship

Technical Skills Summary

Operating Systems	Highly competent in Linux system administration (Red Hat/CentOS and Ubuntu). Intermediate knowledge of Windows operating systems
Scripting/Programming	Thorough experience with Python, Groovy, Perl and bash shell scripting; significant experience with Golang and C/C++/C#; experience with TypeScript, Next.js, and REST API programming
Containerization	Thorough experience with Kubernetes, Mesos/Marathon, and Docker administration
Utilities/Applications	In-depth knowledge of industry-standard tools and technologies such as Jenkins, Ansible, Puppet, git, virtualization, etc.
Cloud services	Familiar with AWS services and infrastructure as code solutions such as Terraform and Terragrunt
Protocols	Knowledge of common protocols such as TCP/IP, UDP, NTP, DNS, HTTP, etc.
Administrative	Excellent troubleshooting and logic skills Outstanding writing and communication skills Strong work ethic, self-motivated and highly interested in tooling and automation Excellent interpersonal and mentorship skills Able to prioritize projects and work well alone or as part of a team Experience with change control processes

Experience

Infrastructure Engineer (tooling and automation team), Riot Games, April 2022 - present

Job Responsibilities

- Find opportunities to build tooling and automation to empower teams across the company
- Build relationships with teams through collaboration and support
- Gather requirements and design solutions for customer needs
- Join teams for project duration when needed

Special Accomplishments

- Generalized the continuous deployment system developed on my previous team, for use by other customers
- Set up CI/CD GitOps workflows for several teams
- Built a pipeline to automate the creation of Fedora images, decreasing engineer time from days to minutes for a new Fedora release

Infrastructure Engineer (container orchestration team), Riot Games, April 2018 - April 2022

Job Responsibilities

- Support container orchestration for the entire organization
- Write tooling to automate manual processes and autoremediate failures
- Respond to customer requests for support with deployment issues and feature requests
- Periodic on-call support

Special Accomplishments

- Designed and implemented a continuous deployment pipeline that decreased engineer time for a release from days to zero (fully automated), increasing production deployment frequency more than sixfold
- Had a major role in the design and development of the next generation container orchestration solution (Kubernetes) used by the entire company
- Wrote tooling to validate code changes before merge that drastically decreased CI failures

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 NetApp storage with a more cost effective and performant solution
- Designed an AWS account structure 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
- Maintenance and development of Puppet modules for configuration management
- Development and maintenance of Python scripts and automation tools
- 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
- Wrote Python scripts to provision and free up servers with a single command, saving a massive amount of time for SREs and NOC
- Ran a bash scripting workshop for junior 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 (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 with minimal administrator interaction, for sandbox, development, and production use
- Wrote scripts to automate configuration of Linux servers across multiple data centers
- Contributed a vast amount of documentation on internal processes, best practices, etc.

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

References provided upon request.