Doug Munsinger
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DevOps Engineer

SUMMARY: skilled senior DevOps/Infrastructure engineer with UNIX systems admin background, experienced in crafting automated Continuous Integration | Continuous Delivery structures using GitHub Enterprise, Gitlab CICD, Jenkins, Amazon Web Services (AWS) and physical servers and employing golang, python, ansible, terraform, packer and bash tooling to create end-to-end systems.

TECHNICAL SKILLS AND EXPERTISE

OPERATING SYSTEMS:

Linux (AmazonLinux 2023, CentOS, Ubuntu, Alpine), UNIX, Windows.

SECURITY:

Iptables, Cloudflare, OpenSSH, IPSEC.

NETWORK APPLICATIONS AND PROTOCOLS:

Postgresql and Mariadb/Mysql, Apache, Apache Tomcat and Nginx. SMTP (Sendmail, Postfix, Qmail), IMAP, DNS (Bind, TinyDNS), Icinga, Spacewalk, Wireshark, BGP and OSPF.

SOFTWARE:

Puppet, Chef, Ansible, FUNC, golang, bash shell script, Python, MySQL. Postgresql, RPM and YUM, including custom package management, Github Enterprise, CVS, SVN, Python, Jenkins, AWS CLI & Boto3, powershell, cygwin, Go SDK.

PROFESSIONAL EXPERIENCE

Staff Infrastructure DevOps Engineer DE4
Toast, Inc, Boston, MA   February 2020 to Present

Create AWS SSM Doc using assumable IAM role to trigger Lambda using a docker image containing code to automate and make self-service for the Payments Team renewal and update of PGP/GPG keys and SFTP keys for auth and signing of financial transmissions.

Develop and deploy automated service to examine docker images deployed into AWS ECS and built and stored in AWS ECR for CVE vulnerabilities and trigger an automated update and rebuild of any images found vulnerable, flagging any failed builds for further handling and allowing a grace period to be set for updates to be available. The tooling allowed using Prisma (Palo Alto Networks), Jfrog Xray or open source CVE scanners (Anchore).

Develop and deploy service in AWS ECS to bridge between multiple Jenkins builders and a custom front end to build and deployment to allow immediate deployment of built images while the custom deployment tool added this functionality natively.

Built and deployed Lambda function using a docker image containing golang code to perform pre- and post- postgresql upgrade sql and vacuumdb tasks to automate and ultimately make database upgrades self-service by the teams owning them.

Make root level changes to infrastructure to remedy issues and then stabilize Toast infrastructure during outages and incidents.

Senior DevOps Engineer
Catapult Sports Inc.   February 2019 to Present

Forklift applications into QA environment in AWS.

Automate creating base AMI from CentOS original. Automate AMI create for windows base AMI and windows IIS webserver using cmd.exe and powershell plus Hashicorp packer. Move msbuild code out of Octopus + TFS, into Jenkins. Automate builds for Jenkins controller and goCD CICD server on Linux.

Senior DevOps Engineer
Verizon Media Group (formerly Oath, Inc., a Verizon Company, and formerly AOL)
June 2017 to February 2019

Built tooling to allow Jenkins to configure itself at boot and to be stateless as part of a CICD build farm behind ELB+ASG Cloud Formation stack in AWS. Simplified DevOps tooling builds by pulling in blocks of coding using git submodules. Designed and coded installer module to allow pulling in specific ansible roles in pipeline builds.

Extended and maintained spin_cloud, a python tool allowing test AWS clouds to be spun up from a simple yaml configuration . Architected, built and maintained a complete CICD system using GitHub, python, ruby, Jenkins, AWS Hashicorp vault and consul, ansible and shell which from commit to testing to deploy requires only approvals from humans. Crafted Nebula-in-a-Box, collapsing enterprise CICD functionality onto a single instance.

DevOps Engineer
AOL, Inc., a Verizon Company (acquired Millennial Media)   November 2015 to June 2017

Crafted and extended CICD Discover Jenkins Plugin, allowing Jenkins to automatically configure and execute pipeline jobs from a git commit without human involvement.   Created and extended hiedra_on_rails to read and parse HiedraDB (arbitrary yaml data injected by etcd into AWS AMIs by ansible). Developed Jenkins server ansible playbook and Vagrant dev environment and integrated packer and ansible to spin up AWS AMI images. Converted existing puppet and chef code to ansible roles..

DevOps Engineer
Millennial Media, Inc. (acquired Jumptap)   October 2014 to November 2015

 Wrote puppet3 modules for automated deployment. AWS Disaster Recovery POC implemented DR in AWS using autoscaling groups, canary listener application and ansible playbooks to bring up Elastic Load Balancer and Autoscaling Groups to duplicate production in AWS on the fly.

System Administrator
Jumptap, Inc.   September 2013 to October 2014

Created QA/Dev VMWare Infrastructure, VMWare Infrastructure for Teamcity build/test development.

Developed and implemented Puppet 3. Implemented and extended beaker rspec testing framework for automated testing and validation of Puppet modules. Implemented hieradata structure and yaml files for site and app dependent configuration.

Network Engineer   September 2012 to September 2013
Paytronix, Inc.

Tested and verified Checkpoint migration of rule base and objects from R60/65 to R75.30.
Configure and deploy second internet feed, router and external switch into DR datacenter.
Work with DR site provider to engineer BGP and network design to accommodate automated failover to 2nd feed.

Sr. Application Operations Specialist   October 2009 to September 2012
Constant Contact, Inc.

Developed automation scripting in Python (core) and Javascript (presentation) using FUNC and Puppet to deploy jBoss and Java applications across 1136 Linux servers in three environments (QA, Prod, DR). Constructed DR site in California, using Puppet to configure, install, manage and bring up jBoss and applications. Create Puppet automation to manage configuration and deployment of new applications.

Senior Software Engineer, System Services   January 2008 to October 2009
Evergreen Investments

Implemented and supported IBM Websphere MQ on Solaris 10, tying directly to custodial services for high value application messaging. Tied Websphere MQ into Sonic Enterprise Service Bus, providing troubleshooting, maintenance and ongoing support 24 x 7. Compiled, installed, piloted, and rolled out to production Subversion replacing CVS.

Senior Customer Support Engineer   May 2006 to January 2008
Crossbeam Systems, Inc.

Hardware, software application and network support for Linux-based Security Appliance. Troubleshooting and resolution of Check Point firewall application issues, Linux kernel, memory and hardware driver issues, network traffic

and routing in large-scale critical networks. Technical Account Manager for major ISP and worldwide major energy company. Professional Services implementations on remote customer sites.

Senior UNIX Systems Admin and Network Engineer   September 2000 to May 2006
Egenera, Inc.

Architected and implemented security and services on Red Hat Enterprise Linux for corporate network - firewalls, apache, VPN, file and print services, DHCP, DNS, Samba, NFS, all internal and external connectivity and monitoring. Architecture, proof-of-concept engineering, implementation and documentation for corporate network services and access. Automated deployment and configuration of servers through kickstart, apps through scripting and switches/ routers via tftp.

Firewall Systems Engineer   March 1998 to September 2000
Fidelity Investments Systems Company, Marlborough, MA

Implement and maintain the Internet firewall structure for Fidelity Investments, 842 SUN Solaris enterprise servers providing proxies, gateways, ipfilter, webservers and relays, across three data centers and two remote hosting facilities. BIG IP load balancers. On-call, 24 x 7. Automated system reporting and tracking using perl + mysql.

Network Administrator   January 1998 to March 1998
Silverplatter, Inc., Norwood, MA   A database and content developing company.

Network services on Linux (DNS, DHCP, silverplatter.com, FTP, monitoring), Netscape messaging services on Solaris, production development on SCO, Linux, and NT. Repaired DNS structure, backups, maintained environment, roll-out of Netscape Server Messaging. Automated existing backup system.

Unix and NT Systems Administrator   December 1996 to 1December 1998
Inforonics, Inc., Littleton, MA   SUN-oriented Database development company

Solaris - UNIX systems administration and SUN Server build and deploy. Developed custom Solaris packaging., Scripted monitoring tools. Automated Windows desktop support and deployment.

EDUCATION

CONTINUING PROFESSIONAL EDUCATION
        AWS Cloud
        Puppet
        Python
        BigIP F3 Network Architecture and Implementation
        RedHat Certified Engineer

Worcester Polytechnic, UNIX Network and Systems Administration

UCLA, Physics Major

REFERENCES - Available on Request