JEN LAGRUTTA

Staff Site Reliability Engineer | Cloud Infrastructure | Automation & CI/CD | High Availability

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Summary

Site Reliability Engineer with expertise in cloud infrastructure and automation engineering, expert in AWS Cloud Platform and Kubernetes. Skilled in designing and maintaining scalable, cost-efficient cloud infrastructure across multi-cloud environments. Experienced in automating CI/CD pipelines, optimizing cloud costs, and implementing robust observability. Proficient in cloud networking, container orchestration, and integrating DevSecOps for secure deployments. Passionate about automation, high availability, and proactive incident response to ensure resilient,high-performing systems.

Past achievements underscore a proactive approach to mentoring and leadership, aligning with goals of enhancing operational excellence and fostering a collaborative engineering culture. Enthusiasm for innovative solutions and continuous improvement guides every project.

Experience

Vox Media	United States
Staff Site Reliability Engineer	04/2022 - 12/2024

Vox Media is an independent media company. Known for building the best media brands and the technology that enables them.

- Improved cloud efficiency by implementing best practices and leading initiatives
- Increased reliability of core cloud infrastructure
- Created centralized networking for all of Vox's AWS accounts, reducing complexity and leading to improved network efficiency and cost savings
- Lead foundational technical initiatives for our cloud infrastructure
- Created clear documentation around deployment processes, infrastructure changes, and troubleshooting guides to ensure that knowledge is shared within the team
- Provided support of CI/CD Systems for engineering teams
- Analyzed and resolved infrastructure-related issues, improving system uptime and performance while decreasing incident response time
- Configured and optimized Fastly CDN to enhance content delivery performance, ensuring fast, low-latency access to assets across global regions
- Designed and automated processes that decreased system downtime, increasing service reliability and availability
- Drove continual improvement in observability, monitoring and scalability

Vox Media	Remote
Senior Site Reliability Engineer II	09/2020 - 04/2022

An independent media company.

- Migrated self-managed Elasticsearch clusters to AWS Elasticsearch managed service
- Implemented a more robust Terraform code for managing EKS clusters
- Worked closely with other high-level engineers and Engineering Managers for designing and implementing performant systems
- Orchestrated a large-scale migration of legacy services to microservices architecture, enhancing system resilience and leading to a reduction in downtime
- Designed and implemented a Centralized Network (Cloud WAN) for approx. 15 AWS accounts, including consolidating VPN management and cross-cloud platform connectivity
- Partnered with cross-functional teams to build and maintain infrastructure, ensuring smooth integration and reduced bottlenecks
- Automated the provisioning and configuration of cloud resources using Terraform

TUNE	Remote
Site Reliability Engineer II - Database Operations	01/2019 - 09/2020

Tune, Inc. is a technology company that provides a platform for managing marketing partnerships across mobile and web

- Provided and supported CI/CD Systems for engineering teams, increasing their deployment frequency and Improving their Mean Time To Deliver (Docker, GitLab CI, SSM, Jenkins, EC2)
- Managed Kubernetes including cluster administration, logging & monitoring, deployments, and ingress & DNS management, all through a CI pipeline
- Drove the migrations of complex services to Kubernetes
- Leveraged Kops and Terraform to implement a self-managed Kubernetes solution on AWS, allowing for easy management, creation and recovery of assets
- Built and supported Terraform projects and modules which manage AWS resources through CI pipelines
- Developed a full Database Change Management CI solution, granting developers more autonomy when performing DB changes

Experience

TUNE
Database Operations Engineer II

Greater Seattle Area
05/2017 - 01/2019

An affiliate marketing platform

- Configured, deployed, ran, monitored and tuned MySQL/Aurora/Snowflake database systems hosted on AWS (both EC2 and in RDS)
- Created and deployed automation utilities for the database operations team, using tools such as Docker, Porter, CIA/Consul, Jenkins, Terraform, puppet and AWS (such as ECS, Lambda, S3)
- Worked with current configuration management system (Puppet), while helping the team drive towards a true infrastructure-as-code world
- Created a self-service database platform for the development teams, including continuous integration for database systems, predictive monitoring and automatic scaling
- Developed and implemented a Terraform Module for provisioning Aurora clusters
- Created a service for automating Datadog monitoring for RDS Instances
- Developed and implemented a Ruby Plugin for FluentD to manage RDS General/Slow/Audit logs

TUNE
Database Operations Engineer

Greater Seattle Area
01/2016 - 05/2017

An affiliate marketing platform

- Created the DB team's database inventory management service.
- Ensured high availability of database endpoints, including management of various replication topologies.
- Troubleshot database performance and availability issues.
- Built and maintained automation tools for managing relational databases (account management, backup/restore, discovery, metrics collection, schema deployment).

Twitter
MySQL DBA

seattle
09/2012 - 01/2015

Twitter
System administrator

San Francisco, CA
09/2009 - 09/2012

X2 Technologies
IT Consultant

San Francisco Bay Area
09/2009 - 12/2010

Rocket Science Consulting
Mission Engineer

San Francisco Bay Area
11/2008 - 09/2009

E*TRADE Financial
Trading Floor Desktop Support

Greater New York City Area and Menlo Park, CA
10/2006 - 11/2008

Wells Fargo
Second Level Desktop Support

San Francisco, CA and Seattle, WA
01/2000 - 07/2005

Key Achievements

AWS Account Optimization
Centralized AWS Account Networks using Cloud WAN, making communication across accounts and Cloud Platforms seamless, less complex and more cost effective.

Collaboration with Development Teams (DevOps Mindset)
Collaborated closely with development teams to ensure the systems were built with reliability in mind, integrating reliability practices into the development lifecycle.

Performance Optimization (Efficiency, Latency, Throughput)
Continuously optimized the performance of services, minimizing latency, and improving throughput from client, microservices and CDN.

Effective Team Mentoring
Mentored several junior engineers and created a hands-on 'break-fix' training course.

Network Efficiency Boost
Significantly reduced AWS network costs by through centralized networking for all accounts.

Resource Management Improvements
Implemented Karpenter on EKS clusters to automate resource scaling, which optimized instance provisioning, reduced costs, and enhanced overall cluster performance and efficiency.

Key Achievements

Service Migration Success
Orchestrated a large-scale migration of legacy services to microservices architecture, reducing downtime.

Elasticsearch Optimization
Successfully migrated self-managed Elasticsearch clusters to AWS Managed OpenSearch, enhancing query performance and minimizing downtime during cluster and index maintenance

Database Migration & Automation
Successfully migrated self-managed MySQL replication databases to AWS Aurora and developed a Terraform module to automate cluster provisioning, reducing operational overhead and eliminating the need for dedicated DBA support.

Improved Observability
Developed proactive monitoring and alerting systems, reducing response times and improving system uptime.

Enhanced Uptime
Decreased system downtime by with automated processes, increasing reliability.

Certification

Fundamentals of Kubernetes Deployment — Coursera

Training / Courses

python development

Skills

Cloud Platform Engineering · Amazon CloudWatch · AWS Cloud WAN · Elasticsearch · Docker · Kubernetes · Communication · Software Configuration Management · Performance Tuning · Microservices · SQL · MySQL · Troubleshooting · AWS RDS · Aurora · Distributed Systems · Debugging · AWS Lambda · Linux · Shell Scripting · API · API Gateway · Start-ups · GitLab Pipelines · Git/SVN · GitHub Actions · Technical Support · Fastly · High Availability · System Administration · Scalability · Database Administration · Continuous Integration · IaaC · Python · Observability · CI/CD Pipelines · Spinnaker · Cloud Networking (AWS/GCP) · VPC Design · Traffic and Routing Management · Terraform · Ansible · Spinnaker · Unix · TCP/IP · Networking · DNS · HTTP(s)