

Dan Wadleigh

Cloud Engineer - AWS/GCP, Terraform, GitHub Actions

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I am a Cloud Engineer focused in AWS/GCP, Terraform, and GitHub Actions with a passion for DevOps culture and practices. My current interests include diving deeper with solutions architecture and automation (Terraform, Go, Python). I have 20+ years professional operations experience with the past 6+ working in the cloud. I have architected, implemented, migrated, managed and maintained cloud solutions for the online testing industry as well as a startup platform.

Project

Cloud Resume Challenge ([Blog Article](#) | GitHub Code: [FE/BE](#) | [View Resume Site](#))

Tech: AWS (S3, API Gateway, Lambda, DynamoDB, plus), Terraform, GitHub Actions, Python (Boto3)

A **Full-Stack Serverless** app hosting resume utilizing **AWS (S3, CloudFront, API Gateway, Lambda, DynamoDB), Python & JavaScript**. The project was built with a focus on learning, growing and evidencing Cloud and DevOps skills.

- Utilized **Terraform** to provision resources including use of Modules and Remote Backend State.
- Implemented **GitHub Actions** with Cypress testing for automation in CI/CD pipeline.
- Strengthened **Security** leveraging AWS WAF, SSL/TLS, S3 OAC, KMS, & Parameter Store.
- Enhanced **Monitoring & Alerting** with integrations from SNS/ChatBot to PagerDuty and Slack.

Experience

American Express - Cloud Engineer (GCP, Terraform)

December 2024 - Present (Phoenix, AZ)

Tech: Google Cloud Platform - Service Projects, Compute Engine, Managed Instance Group, Internal Load Balancer, VPC, IAM, Firewalls, GitHub, GitHub Actions, Terraform: configuration, module development, testing (Terraform test framework, Terratest), policy-as-code (Sentinel, Open Policy Agent)

- **GCP Infrastructure Provisioning:** Led implementation of a SNAT VM architecture in Google Cloud Platform for a proof-of-concept project, collaborating with Network Security and Cloud Operations teams to enable secure outbound access for private workloads.
- **Infrastructure-as-Code with Terraform:** Developed a reusable Terraform module for SNAT VM deployment, implemented automated testing modelling Terraform test framework and Terratest for validation, to enable wider team adoption.
- **Standardized Cloud Architecture Patterns:** Collaborated on a cross-functional team to define and document standard cloud architecture patterns, including architecture diagrams and best practices to accelerate cloud adoption and consistency across teams.
- **System Documentation Development:** Produced and maintained cloud infrastructure documentation using Docusaurus and GitHub Pages; implemented markdown linting to improve consistency.

YellowBird Holdings - AWS Cloud Engineer (AWS, GitHub Actions)

October 2022 - January 2024 (Phoenix, AZ)

Tech: AWS - Orgs, Client VPN, WAF, IAM, Route 53, VPC, SG, ALB, EC2, EBS, ECS, ECR, CodeDeploy, S3, RDS Postgres, OpenSearch, Amplify, MQ, CloudWatch, CloudTrail, SNS, Chatbot, Backup / GitHub, GitHub Actions, Amazon Linux, Docker, Terraform

- **Scalable AWS Cloud Infrastructure Design:** Designed and implemented a scalable multi-account AWS infrastructure using AWS Organizations, reducing service deployment time, improving security, and enabling independent service development across teams.
- **Database and Application Migration to AWS:** Led and participated in the migration of databases and applications from Heroku to AWS, utilizing Postgres RDS and Docker containers, and achieving a smooth transition with zero critical downtime.
- **Container Orchestration with ECS Fargate:** Implemented AWS ECS Fargate to orchestrate containerized applications, improving deployment speed and enabling automated scaling.
- **CI/CD Pipeline with Blue-Green Deployment:** Designed and implemented a fully automated CI/CD pipeline leveraging GitHub Actions, AWS ECR, ECS Fargate, and CodeDeploy with Blue-Green deployment, reducing deployment time and increasing deployment frequency, ensuring zero-downtime updates and faster feature releases.
- **Application Security Enhancement:** Improved application security by deploying CloudFlare and AWS Web Application Firewall (WAF), mitigating threats and ensuring greater protection of customer data and system integrity.
- **API Integration:** Collaborated with a client to implement API integration between platforms, improving security with AWS WAF and ALB and optimizing traffic management.
- **Terraform POC for AWS IaC:** Recommended a Proof of Concept for provisioning AWS cloud infrastructure using Terraform to demonstrate the effectiveness of IaC for automating resource management.
- **Monitoring and Alerting System Development:** Developed and maintained monitoring and alerting systems using AWS CloudWatch, improving system reliability, and ensuring faster incident response through proactive issue detection and integration with incident management tools.
- **Cross-Team Collaboration for Issue Resolution:** Collaborated with the development team to identify and resolve system issues, and improving overall system stability through proactive troubleshooting, performance optimizations, and enhanced incident response processes.
- **System Documentation Development:** Created and maintained comprehensive system documentation, reducing onboarding time for new team members and improving system support efficiency, enabling faster issue resolution and consistent system management.

Kryterion - AWS Cloud Engineer (AWS, Terraform, Linux)

December 2019 - October 2022 (Phoenix, AZ)

Tech: AWS - Client VPN, IAM, Route 53, VPC, SG, CloudFront, EC2, EBS, S3, EFS, RDS MariaDB, ElastiCache Redis, Lambda (Python), SES, SNS, Chatbot, CloudWatch, CloudTrail, Systems Manager, Backup / Amazon Linux, NGINX, Postfix, RabbitMQ, GitLab, Ansible, Jenkins, Artifactory, Docker, Terraform

- **Interim Manager, IT Operations:** Led the IT Operations team during a critical transition period (covid/wfh), maintaining uptime for key systems and company operational workflow efficiency while ensuring a smooth handover to the incoming manager.
- **Application Migration to AWS:** Collaborated to the design and implementation of a successful migration from on-premise data center to AWS, reducing infrastructure costs, and improving system scalability, with zero critical downtime during the migration.

- **AWS Infrastructure Management:** Ensured 99.9% uptime for critical AWS infrastructure across security (IAM, SG) networking (VPC, Subnets), compute (EC2, Lambda), storage (S3, Glacier, EFS), and databases (RDS, ElastiCache Redis), while improving system performance and reducing downtime incidents through proactive monitoring and issue resolution using CloudWatch, CloudTrail, and other AWS management tools.
- **DevOps Collaboration:** Partnered with DevOps to automate code deployment via Ansible and GitLab, reducing deployment times, minimizing errors, and enabling faster and more consistent feature releases through the CI/CD pipeline.
- **Terraform, Infrastructure-as-Code Implementation:** Collaborated on the successful deployment of a Terraform-based Infrastructure-as-Code solution for a client's testing environment, reducing provisioning time, improving environment consistency, and enabling faster, more efficient testing cycles through automated deployment.
- **Ansible Playbook Management:** Managed and modified Ansible playbooks to automate system configuration, reducing errors and manual effort, resulting in faster, more reliable deployments across development, testing, staging, uat and production environments.
- **Bulk Email System Migration to SES:** Migrated quarterly bulk email system to AWS Simple Email Service (SES), improving deliverability and ensuring compliance with SPF, DKIM, and DMARC protocols, resulting in more effective email campaigns.
- **Onboarding Training Program Development:** Created and implemented an onboarding training program for new sysadmins, reducing time-to-productivity and improving initial work quality through hands-on training, structured documentation, and a mentoring system.

Kryterion - Linux System Administrator

February 2018 - November 2019 (Phoenix, AZ)

Tech: CentOS Linux, VMWare, GitLab, Ansible, Grafana, Python, Bash, NGiNX, Postfix, RabbitMQ

- **Production SaaS Application Support:** Served as an administrator on a team responsible for supporting production SaaS web applications, reducing downtime and improving incident response times through proactive monitoring, incident management, and system optimization.
- **Linux Environment Support for Development Team:** Provided critical support to the development team by maintaining stable and dependable applications/systems across a Linux environment, reducing application downtime and improving system performance, leading to smoother development and deployment processes.
- **Infrastructure Monitoring and Alerting:** Built and configured a Paessler/PRTG monitoring solution for the infrastructure, integrating it with AWS CloudWatch, and Grafana for real-time, NOC-like dashboards, reducing incident response times and improving system reliability through enhanced visibility and proactive alerts (SNS, PagerDuty, Slack).
- **Google Analytics Real Time Monitoring Script:** Developed a Python script to monitor Google Analytics data via the Realtime API, reducing manual monitoring time and enabling instant reporting to stakeholders for faster decision-making and improved website performance analysis.
- **Automated Service Monitoring with Bash Scripts:** Developed Bash scripts to automate the monitoring of critical services (Postfix, RabbitMQ, NGiNX, JVM), improving issue detection time, leading to enhanced system stability and reduced downtime.

Nordstrom - Linux System Administrator

September 2014 - February 2018 (Denver, CO)

- **24x7 On-Call Data Center Support:** Provided 24x7 on-call support for data center operations, reducing incident resolution time and maintaining uptime for critical enterprise systems through proactive monitoring, troubleshooting, and cross-team coordination.
- **Cross-Team Collaboration for System Availability:** Built strong working relationships between infrastructure and application development teams, improving overall system availability through better communication, faster issue resolution, and proactive system optimization.
- **OS-Level Troubleshooting and Break-Fix for Linux/Unix:** Utilized OS-level proficiency to troubleshoot and resolve issues for Red Hat Linux and Oracle Solaris Unix systems, reducing system downtime and improving stability through break-fix actions and maintenance.

Education & Military

Courses towards Computer Science/IS (90cr)

Husson College (00-01)

University of Maine (99-00,93-95)

University of Vermont (91-93)

United States Marine Corps - Infantry (95-99)

Meritorious Promotions to Cpl and Sgt

1st Marine Division Marine of the Quarter

Certifications

AWS Solutions Architect Associate (2019)

HashiCorp Terraform Associate (2022)

Kubernetes & Cloud Native Associate (2022)