Vipin Kumar Yadav

DevOps Engineer

Professional Summary

DevOps Engineer specializing in AWS, Azure, Kubernetes, Terraform, and CI/CD automation. Skilled in the deployment of scalable infrastructure, automating workflows, and improving deployment Helm, ArgoCD, and Jenkins. Strong background in monitoring (Prometheus, Grafana) and Infrastructure as Code (IaC) to improve system reliability and efficiency

EXPERIENCE

Rafay Systems March 2024 -

DevOps Engineer

Bangalore, India

- Developed an internal developer portal using Backstage, centralizing service catalogs, CI/CD pipelines, and infrastructure documentation, enhancing developer efficiency and reducing onboarding time.
- Optimized application delivery and maintenance by managing Kubernetes deployments and patching via ArgoCD, reducing downtime by 20% and ensuring seamless updates.
- Reduced cloud costs by 15% by implementing an AWS Lambda function to automate resource tagging and enforce per-user usage limits.
- Developed and managed Helm charts, ensuring Infrastructure as Code (IaC) best practices for scalable and consistent Kubernetes deployments across environments.
- Enhanced RDS observability by building a Prometheus exporter in Go, enabling real-time database performance tracking and enabling proactive issue resolution.
- Built Patch Engine, an automated service patching by developing a Patch Engine, integrating ticket scanning, Git tagging, Jenkins monitoring, PR creation, and ArgoCD sync, reducing manual intervention by 70%.
- Accelerated CI/CD pipelines by 30% by automating artifact uploads, Docker deployments, and PR validations using GitHub Actions.
- Improved system security and scalability by designing a resilient Jenkins build server with RBAC, reducing build failures by 25% and enforcing role-based access control and controlled cost by using stop instances for agents.
- Collaborated across multiple teams to define requirements, create/update Helm charts, and manage production releases, ensuring compliance with Continuous Integration (CI) and Continuous Deployment (CD) best practices.

Presidio Solutions Pvt. Ltd.

July 2022 - February 2024

Cloud & DevOps Engineer

Bangalore, India

- Deployed a scalable three-tier microservices application on AWS EKS with Jenkins Pipelines, reducing deployment time and improving system resilience.
- Automated Azure Key Vault secret rotation using PowerShell and Python, eliminating manual intervention and improving security compliance.
- Optimized CI/CD workflows in Azure DevOps, accelerating PowerPlatform deployments and enhancing team collaboration.
- Implemented an enterprise-scale Azure Landing Zone using Terraform, ensuring standardized infrastructure deployment and governance while reducing provisioning time by 50%.
- Designed and managed secure Azure Virtual Networks, integrating vWAN, VPN gateway, and NSGs for seamless hybrid cloud connectivity.
- Configured AWS SSO with Azure AD, simplifying access management, enforcing granular permissions, and reducing authentication issues by 40%
- Contributed to standard Terraform Modules for AWS/Azure resources, ensuring adherence to best practices and enabling seamless configuration management for diverse infrastructure requirements.

SKILLS

Cloud Platforms: AWS (EC2, S3, Lambda, RDS, IAM, EKS, VPC, ALB/NLB, AWS SSO), Azure (AKS, Virtual Networks, Key Vault, Azure AD, Azure DevOps)

CI/CD & Automation: Jenkins, GitHub Actions, Azure DevOps, ArgoCD

Container Orchestration & Deployment: Kubernetes (EKS/AKS), Helm, Docker, ArgoCD, Istio, Service Mesh Infrastructure as Code (IaC): Terraform, CloudFormation, Helm, Ansible

Security & Access Management: AWS IAM, AWS SSO, Azure AD, RBAC, Secret Management (AWS Secrets Manager, Azure Key Vault), Hasicorp Vault

Monitoring & Logging: Prometheus, Grafana, EFK Stack, CloudWatch, Azure Monitor

Programming & Scripting: Python, Bash, Go, PowerShell

Projects

$\textbf{Storefront API (API Development)} \mid \textit{Python, Django, Django-rest-framework, PostgreSQL}$

• E-commerce API built with Python, Django, and PostgreSQL, featuring functionalities like user management, product operations, cart handling, and order placement, with JWT-based authentication ensuring secure and restricted access.

Online Code Compiler | Python, Docker, Redis, Flask

May 2018 – May 2020

• A multi-language compiler designed for efficient coding, utilizing Redis and queuing to handle concurrent requests seamlessly, with a unique tracking ID system for real-time result retrieval and status updates.

EDUCATION

Sri Eshwar College of Engineering (Anna University)

 $Bachelor\ of\ Engineering\ -\ Computer\ Science$

August 2018 - June 2022

CERTIFICATIONS

- Microsoft Azure Fundamentals
- Microsoft Azure Administrator Associate