# Bala Potanna Gowdu (4+ Years AWS DevOps Engineer)

Email: balapotanna06@gmail.com AWS DevOps Engineer (AWS, Ansible, Jenkins & Docker)

**Objective:** Seeking challenging assignments in technology-oriented organization.

#### **Professional summary:**

• **Having 4+ Years** of IT experience as a cloud & Devops Engineer with exclusive hands-on experience in **AWS DevOps and Jenkins.** 

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- Excellent skills in applying DevOps Continuous Deployment and Continuous Delivery processes & tools. [Ex: Git, Maven, Jenkins, Tomcat, Ansible, Docker etc....].
- Experience in branching, tagging and maintaining the versions across the environments.
- Working on Software Configuration Management (SCM) tools like GIT.
- Hands on experience in **Maven** build tool for compiling and packaging the artifacts.
- Having good exposure in CI tools like Jenkins.
- Configuring Jenkins job with related Plugins for Building, Testing and Continuous Deployment to accomplish the complete **CI/CD**.
- Involved in Installing Jenkins on a Linux machine and created a master and slave configuration to implement multiple parallel builds.
- Good knowledge on writing declarative pipelines scripts using **DSL**.
- Experience in configuring and updating the servers using configuration management tools like **Ansible** and Experience in **Containerization** tool like **Docker**.
- Knowledge on writing playbook.
- Expertise with container-based deployments using **Docker**, working with **Docker images**, **Docker Containers**, **Docker files** and **Docker registries**.
- Experience in writing **Kubernetes** service and deployment files.
- Experience with cloud infrastructure of AWS (Amazon Web Services) like EC2, IAM, S3,
   VPC, Elastic Load Balancer, EFS, S3, Auto Scaling Groups (ASG), EBS, RDS, IAM,
   Route 53, Cloud Watch, Cloud Trail, Lambda, SNS, SQS, Cloud Formation & EKS.
- Good knowledge on **Linux** environment.
- Experience in Writing AWS IAM policies.
- Worked on web servers like **Apache Tomcat** and **Nginx** to deploy code.
- Work with Development and **QA & Testing** Teams to establish a build schedule, execute the builds and troubleshoot build failures.
- Knowledge on Azure like creating Virtual Machine, Virtual Network, Azure App Services, Azure Functions, Azure storage services etc.
- Good understanding of the software development life cycle (SDLC) in an Agile Methodology

# **Technical Expertise:**

Operating Systems	Linux, Ubuntu
Version Control Tools	Git, GitHub
Build Management Tools	Maven, npm
Configuration Management Tools	Ansible
CI/CD Tools	Jenkins , GitHub Actions
Containerization platform	Docker
Container Orchestration Tool	Kubernetes
Infrastructure (IAAS)	Terraform
Scripting Languages	Shell script
Application Servers	Apache Tomcat, nginx
Artifact Repository	Nexus , Jfrog
Static code analyser	SonarQube
Cloud	AWS, Azure
Other Tools	Visual Studio Code

### **Education Details**

> **B Tech from JNTU Kakinada** University.

### **Employment Summary:**

- ➤ Worked as a Devops Engineer in WNS Global Service Pvt Ltd. From 22 Feb 2021 to 15 Feb 2023.
- ➤ Worked as a AWS DevOps Engineer in AVATAA Solutions Pvt Ltd. From March 1<sup>st</sup> 2023 to 30<sup>th</sup> Sept 2024.
- ➤ Working as a Aws & Azure DevOps Engineer in HealthNet Global Limited From 17th Oct 2024 to Till date

# **Project Details**

## Project #1

Project Title : Apollo Health Care

Team Size : 3

Role : DevOps Engineer
Period : Oct 2024 to till now
Environment : Aws and Azure

- Implemented GitHub Actions to automate CI/CD workflows, ensuring continuous integration, testing, and deployment within GitHub repositories.
- Configured user access to AWS and datacenter resources using LDAP, VPN and AWS IAM

- Designed and executed migration strategies from AWS to Azure Infrastructure
- Led the migration plan from AWS RDS database to Azure RDS, covering infrastructure, storage blobs, functions, and API gateways
- Created several IAM users and roles for Developers and AWS resources as per the requirement.
- Created and managed several Windows and Linux EC2 instances as required.
- Worked on AWS security using WAF, ACL rules.
- Automated processes including heap dump generation, ECS service updates, and IAM user lists.
- Configured automatic snapshot creation of EC2 instances using lambda functions.
- Orchestrated AWS network infrastructure using VPC and subnets.
- Managed multiple VPCs and Subnets across different AWS accounts and regions.
- Configured connection between VPCs and On-premise resources using VPC peering, site-to-site VPN connection, Transit gateway.
- Worked on Creating and Managing S3 buckets, Static website hosting setup, lifecycle policies, ACL policies and CORS
- Utilized Jenkins for microservices deployments and CRON Jobs for scheduled service restarts.
- Dockerized applications using Dockerfiles and integrated with GitHub Actions for deployment on ECS and EKS.
- Set up and implemented Cloudwatch metrics and alerts.
- Configured various Dashboards, Alerts and metrics in Cloudwatch for microservices and other resources.
- Hands-on experience on other AWS services like Cloudtrail, ElastiCache, Lambda, Route 53, SNS.

### Project #2

**Project Title : One Source** 

Team Size : 5

Role : AWS Devops Engineer Period : March 2023 to Sept 2024

**Environment**: Aws

- Automated CI/CD pipelines for seamless integration and deployment using Jenkins, Git, Maven, Nexus, and SonarQube, improving deployment efficiency and reducing manual errors.
- Configured and optimized AWS cloud infrastructure, including VPC, EC2 instances, S3 storage, Elastic Load Balancers, and AutoScaling Groups using Terraform to ensure high availability and security.
- Orchestrated the deployment of containerized applications using Docker and Kubernetes, leveraging Helm charts for efficient management of services, pods, and deployments.
- Integrated Ansible for configuration management and automated tasks across multiple environments, ensuring consistent and repeatable deployments.
- Implemented AWS IAM roles and policies for secure access management and compliance with organizational standards.
- Reduced deployment time by 40% and improved system reliability by automating manual processes and optimizing CI/CD pipelines.
- Migrated legacy on-premise infrastructure to AWS cloud with minimal downtime using AWS DMS and CloudFormation.

#### **Key Achievements:**

- Successfully automated infrastructure provisioning and reduced manual errors using **Terraform** and **Ansible**.
- Implemented monitoring and alerting systems with AWS CloudWatch and Prometheus, improving incident response time by 25%.
- Optimized container orchestration with **Kubernetes**, resulting in a **30% reduction in** resource utilization.

#### 1. AWS Infrastructure Automation

 Automated cloud infrastructure provisioning using Terraform for EC2,S3, VPC, and IAM roles,resulting in efficientresource management and cost optimization.

#### 2. Kubernetes Microservices Deployment

 Built Docker images and deployed microservices on Kubernetes clusters with Helm charts, achieving automated scaling and high availability of applications.

## 3. CI/CD Pipeline Optimization

• Created and optimized Jenkins pipelines with SonarQube integration, ensuring automated testing and security checks, which reduced build errors by 30%.

#### Project #3

**Project Title : Health Care Console** 

Team Size : 3

Role : DevOps Engineer
Period : Feb 2021 to Feb 2023

**Environment**: Aws

- Configured and optimized AWS cloud infrastructure, including VPC, EC2 instances, S3 storage, Elastic Load Balancers, and AutoScaling Groups using Terraform to ensure high availability and security.
- Proficient AWS (Amazon Web Services) like EC2, IAM, S3, VPC, Elastic Load Balancer, EFS, S3, Auto Scaling Groups (ASG), EBS, RDS, IAM, Route 53, Cloud Watch, Cloud Trail, Lambda, SNS, SQS, Cloud Formation & EKS.
- Experienced in creating multiple VPC's and public, private subnets as per requirement and distributed them as groups into various **availability zones** of the **VPC**.
- Created NAT gateways and instances to allow communication from the private instances to the internet.
- Used **security groups**, **network ACL's**, internet gateways and route tables to ensure a Secure zone for organization in **AWS** public cloud.
- Created and configured **elastic load balancers** and **auto scaling groups** to distribute the traffic and to have a cost efficient, fault tolerant and highly available environment.
- Managed **S3** buckets in the AWS environment to store files, sometimes which are required to serve static content for a web application.
- Written Terraform templates to create custom VPC, subnets, NAT to ensure successful
  deployment of web applications.
- Maintained the monitoring and alerting of production and corporate servers using Cloud Watch service.
- Monitoring Cloud Trail events for User activities and API activities.

- Created **EBS** volumes for storing application files for use with **EC2** instances whenever they are mounted to them.
- Set up and managed **EBS backup** and recovery using **snapshots**. And also, images to store launch configurations of the EC2 instances.
- Written Templates for AWS infrastructure as a code using **Terraform** to build staging and production environments
- Applying Auto Scaling between **ELB** and **EC2** instances for high availability of applications.

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