

PROFILE SUMMARY:

A results-driven DevOps Engineer in building, maintaining deployment pipelines across multiple environments (cloud & on-premises). Proficient in implementing infrastructure as code (IaC) using tools like Terraform & CloudFormation, and adept at managing CI/CD workflows with Jenkins. Skilled in containerization technologies such as Docker & Kubernetes and experienced with cloud platform (AWS). Strong problem-solving and troubleshooting abilities with a focus on system optimization and scalability. Passionate about continuous improvement and working collaboratively to deliver high-quality, reliable and scalable applications.

TECHNICAL SKILLS:

Operating Systems : Ubuntu, CentOS7, Amazon Linux, Windows.

DevOps Technologies : Git, GitHub, GitLab, Jenkins, FluxCD, Docker, Kubernetes, EFK, Prometheus, Grafana, Ansible, Terraform.

Cloud Platform : AWS Services (IAM, EC2, AutoScaling, Load Balancer, EBS, VPC, VPN, S3, ACM, Route53, CloudWatch, SNS, SSM, Elastic Beanstalk, CloudFront, Chatbot and ECR, ECS, EKS, EKS-Anywhere) and Azure DevOps.

WORK EXPERIENCE:

Tech Mahindra Pvt. Ltd | Sr. Software Engineer | August 2021 - Present

AWS-O-RAN

April 2024 - Present

Project Description: The AWS EKS Anywhere ORAN testing project involved executing comprehensive end-to-end test cases to evaluate cluster creation, configuration management, application deployment, security, networking, storage, observability, backup, upgrade and rollback, monitoring and cluster operations. The rigorous testing process ensured the robustness, reliability, and efficiency of the EKS Anywhere platform that is deployed on the bare metal servers. Post EKS-A deployment we have performed the pre-requisite configuration changes for Mavenir DU Deployment on EKS-A bare metal cluster.

Roles and Responsibilities:

- Connect to IDRAC Dell, HPe, SuperMicro server's upgrade/downgrade Firmware, Bios, CPLD and Nic driver.
- Tuning BareMetal server's to reduce the boot time, Configured the Admin machine and installed required package (eksctl, eksctl-anywhere, docker, kubectl) to run EKS-Anywhere.
- Configured connection b/w AWS cloud to private datacentre wise AWS VPN service.
- Building node images for BareMetal server by using image-builder tool.
- Installation OS/Kubernetes on the On-Premises server's by using EKS-A tool and Post configuring DU/CU readiness on server.
- Install/Configured LongHorn for managing PV/PVC and Harbor version control for EKS-A docker images, EFK for monitoring pods logs and Prometheus & Grafana for nodes metrics.
- Managing management & standalone cluster and creating, maintaining project related documentation.

Technologies:

- AWS Cloud
- On-Premises
- Kubernetes
- EKS-Anywhere
- FluxCD, EFK
- LongHorn
- Harbor
- SOPS with PGP
- Prometheus
- Grafana

RAKUTEN 1&1 LAB BUILD

May 2023 - March 2024

Project Description: Open RAN stands for open radio access network; it is an ongoing shift in mobile network architectures that enables service providers the use of non-proprietary subcomponents from a variety of vendors. An Open RAN is made possible by a set of industry-wide standards that telecom suppliers can follow when producing related equipment. It enables programmable, intelligent, disaggregated, virtualized, and interoperable functions. Specifically, the proprietary remote radio head (RRH) and baseband units (BBUs) are now disaggregated to radio units (RUs), distributed units (DUs), and centralized units (CUs), many of which can be virtualized or containerized. The interfaces between these new components are open and interoperable.

Technologies:

- On-Premises
- Kubernetes
- Robin Platform
- JFrog
- Hashicorp Vault
- Bmaas
- BMM tool

Roles and Responsibilities:

- Connect to IDRAC Dell, SMC server's upgrade/downgrade Firmware, Bios, CPLD and Nic driver.
- Installed OS and configure IP address to BareMental server's using Bmaas tool then installing HA Kubernetes with Robin package.
- Robin cluster up then creating rpool, roles, file collection, tenant, namespace, user's and adding docker artifactory.
- Configured IP-pool/Vlan for Kubernetes networking via both Calico and SRIOV/MacVlan/OVS drivers.
- Preparing templates (IPAM, Naming, BMM, Data center) for Json generating and cluster creation by using BMM tool.
- By using templates OS/IP/Kubernetes will automatic installed and configured.
- Creating logical storage volumes pvs, vgs and lvs based on requirements.
- Troubleshoot and resolve issues related to application deployment and operations.
- Troubleshooting network connectivity of pods and VMs.

FB MAGMA LABS

Aug 2021 - April 2023

Project Description: As part of this project, a CI/CD or DevOps platform was developed to advance development of CI/CD use cases, technology, and solutions. The Open RAN CI/CD platform is an assembly of microservices that take suppliers' RAN software deliverables as input, and performs integration, testing, and deployment automatically. The platform can also support zero-touch provisioning by integrating with the supplier's specific RAN management open interface plug-ins.

Technologies:

- AWS Cloud
- Kubernetes
- Git, GitHub
- Jenkins, GitLab
- Sonatype Nexus
- Hashicorp Vault
- Kong Gateway
- ELK, Kafka
- Prometheus
- Grafana

Roles and Responsibilities:

- Creating VPC and Subnet (public and private) and configuring route tables.
- Launch instances in the AWS, configuring security group & route tables and Installed Kubernetes on instances with kubeadm and deployed Calico-Network for pods communication.
- Configured bash host instance to connect the kubernetes cluster and installed Helm package.
- Deployed MySQL, Cassandra, PostgreSQL, Nexus repository, Vault, Kong, ELK, Prometheus, Grafana with Helm package manager.
- Installed Jenkins on instance and setup connection b/w GitHub & Jenkins.
- Configured Jenkins pipelines for Django base applications as a microservices and deployed in Kubernetes cluster.
- Configure auto-deploy in Jenkins, When changes done in GitHub.
- Manage docker images, versions control & publish in Nexus repository.
- Configured Kubernetes logs to Kibana and Prometheus and Grafana to monitoring CPU, RAM, Network usage of pods as well as instance.
- Troubleshoot and resolve issues related to application deployment and operations.
- Solved the disk space issue on root/home volume and solve network and storage issues in Pods.
- Created and maintaining Project related documentation.

EDUCATION:

B. TECH – MECH, MLR Institute of Technology, Dundigal

CGPA: 7.3

 June 2015 – May 2019

STRENGTH:

- Communicational Skills.
- Team Player.
- Hard work with lots of patience.
- Self-motivated.
- Adaptive to atmosphere and quick at grasping.

CURRICULAR ACTIVITIES AND ACHIEVEMENTS:

- Completed “Rotations” a Purdue spatial visualization test, Conducted by Rowan University.
- Presented a prototype on “Quadcopter” at THE TECH FEST 2017, JNTUH.
- Participated in Workshop on “Quadcopter Development” Organized by MLR Institution of technology, Hyderabad.
- I secured 3rd prize in micro project at MLR Institution of technology.
- Participated in RASTA - Roads Are Safe to All (5k run).
- Participated in Webcasting on the poll day during General Elections for the Telangana state.
- Participated in ITRRODDD - collecting fund for the welfare of the Blind children.
- Participated in Sree arts cultural association state Level drawing competition.

CERTIFICATION:

- AWS Solution Architect - Associate (SAA-C03)

DECLARATION:

“When all are not enough, I will fill the space by faith & confidence”.

Here with, the above mentioned are true to the best of my knowledge and belief. I am liable to disqualify if any information given, I found to be incorrect or false.