

Madhu AM, DevOps Engineer

Email : madhu.am321@gmail.com

Phone: +91 9206352478

Summary:

As a 1.4 year experienced DevOps engineer is responsible for continuous integration and continuous deployment. A solid understanding of automation tools and how they are used, including Git, Jenkins, Docker, Kubernetes, GitLab, Splunk, Grafana, AWS, Shell scripting, Kafka, Jira, SonarQube, and Maven.

Key Deliverables:

- Knowledge
- in **AWS** tools EC2, S3, IAM, EBS, EFS and creating snapshots and AMIs, volumes and snapshots, attaching and detaching volumes and creating own AMIs for replication of the same environment in same/different availability zones as well as regions.
- Creating the **Kubernetes** cluster, managing them with Namespaces and monitoring with UI tool (offset explorer).
- Improved AWS security position with automated security best practice checks powered by AWS Config rules on **AWS Security Hub**.
- Wrote the **Shell script** for automating and scaling the threshold services for Kubernetes.
- Hands-on experience in working with **Git, GitHub** and **Gitlab**.
- Installed and configured build tools like **Maven**.
- Scripting for getting the ingress and the secrets in all the environment like staging, Dev, Pre-production and Production.
- Added **SonarQube** plugins inside Maven's pom.xml file for Code coverage and Source code analysis report.
- Implemented the setup for Master Slave Architecture to improve the performance of **Jenkins** and Implemented parallel builds.
- Having hands-on experience in **Linux commands** and Shell Scripting.
- Script to **Scaling the Lambda**. (Python).
- Implementing the **Alerts in Grafana** to find the CrashBackLoopOff, ImagePullBackOff, Deployment_status_replica_avalaibale, Cron_job_spec_failed.
- Renewing the **NCLM** certificates and patching them with the ingress.
- Creating the **Grafana and Splunk** Dashboards to monitor the entire Kubernetes cluster, AWS and Kubernetes services.
- Worked on implementing the Multiregional kafka cluster. Experienced in rotating the **Kafka key**. Skills:

- Version Control Tools: Git, GitLab
- Build tool: Maven.
- Containerization Tool : Dockers, Kubernetes
- Ticket Tracking Tool : Jira, Pier
- Language: Java, SQL, Shell Scripting, Python
- Configure management tool: Ansible, Terraform
- AWS: EC2, S3, Cloud Watch, Certificate manager, Security Hub, Lambda, CI/CD pipelines
- Operating System: Linux and Windows.
- Streaming Tool : Kafka
- Monitoring Tool : Grafana, Splunk
- Certificate Manager: NCLM, AWS Certificate manager.

Education:

- ✓ MCA (Computer Applications) graduate from Maharani Science College for Women – 2021.

Employment Details:

- ✓ TestYantra Software Solutions India Pvt. Ltd. (MAR- 2022 to Till Date) – DevOps Engineer.

Project & Responsibilities:

Project: Smartek21, T-Mobile USA Inc.

- SMPD (T-Mobile) Social Media Product Development(SMPD) is all about supporting and solving concerns of their respective consumers through environment called Live Engage (Messaging Channels) and Khoros (Social Media Channels) where SMPD has developed widgets to make It more effective for the Agents as well as for the consumers.
- Monitor the infrastructure and resolve Kubernetes services issues and analyse logs for the respective services using Splunk logs.
- Domain renewal in the network level with the use of NCLM certificate renewal and patch Kubernetes ingress and AWS Certificate manager used in free flow Kubernetes ingresses.
- Checking the CPU and Memory utilization in Grafana, when certain K8 Alerts and Grafana alerts are received.
- Creating tickets for third party issues. Handle Pacbot violations by performing patching and updating for the respective EC2 instances.
- Created kafka clusters with and without zookeepers, checking Kafka brokers after patching either using tools or in Grafana.
- Cloud Security with AWS, Managing the cloud infrastructure with best practice under AWS Security or Organization advised measures.
- Managing the Kubernetes cluster by automating restarts and scaling process with shell scripting.
- Best use of monitoring the down time of production that can be identified instantly with by setting up Grafana Dashboards and Splunk Logs.