

THOMAS VEMPADAPU

DEVOPS ENGINEER

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PROFESSIONAL SUMMARY

Cloud and DevOps Engineer with **2.3 years** of hands-on experience in automating and managing cloud infrastructure across **Kubernetes, OpenShift, AWS, and Azure** platforms. Skilled in deploying, maintaining, and optimizing containerized applications using CI/CD pipelines with tools like **Jenkins, Github** and implementing GitOps practices using **ArgoCD**. Proficient in designing secure, scalable, and highly available cloud-native infrastructures with a strong emphasis on automation, performance tuning, and DevSecOps best practices. Experienced in Linux system administration and **Bash scripting** for automating daily operations and infrastructure tasks. In addition to hands-on experience with the above technologies, possesses knowledge of **Terraform** and **Mend**, with ongoing efforts to expand expertise in infrastructure as code and security scanning practices.

TECHNICAL SKILLS

Cloud Platforms:	CICD Tools:	Container Platforms:	Kubernetes	Trivy
AWS	Jenkins	Docker	Openshift	Terraform
Azure	ArgoCD	Podman	Helm	Mend

PROFESSIONAL EXPERIENCE

PragmaEdge (APR 2023 - Present)

IBM PEM CM - Product

- Managed and published product images and Helm charts to IBM Fix Central and IBM Passport portal
- Built and maintained efficient, production-ready container images using Docker
- Developed Bash scripts to automate container startup and initialization tasks.
- Automated testing and release pipelines using Jenkins, minimizing manual effort and improving code quality.
- Maintaining application source code in internal Github central repository and Helm charts in IBM Github
- Integrated SonarQube for identifying security vulnerabilities and Established quality gates in CI/CD pipelines to automatically block code merges when security thresholds weren't met.
- Fixing container security vulnerabilities detected on Blackduck and Mend
- Provided product support for debugging application issues raised in IBM support cases and performed application deployments on container platforms including Kubernetes, OpenShift, and Podman.
- Designed and developed Helm charts and Kubernetes manifest files for complex, multi-environment deployments
- Documented newly released product features related to containers for internal and external use.
- Applied Kubernetes security best practices such as PSS, PSA, Security Context Constraints (SCC), Network Policies, Secrets Management, and workload identity bindings.
- Optimized performance through Vertical and Horizontal Pod Autoscaling (VPA/HPA) and fine-tuned resource requests and limits.
- Set up and maintained authentication using the htpasswd identity provider, assigning permissions via RoleBindings, ClusterRoleBindings, and service accounts with scoped ClusterRoles in internal OCP cluster

PepsiCo - Platform Support & Openshift Administrator

- Provisioned Vnets, subnets, OpenShift clusters, and databases (PostgreSQL, Oracle), Elastic search as a service in AWS Cloud.
- Integrated Kubernetes manifests such as Deployments,Statefulsets ConfigMaps, Secrets, Persistent Volumes (PVs), and Persistent Volume Claims
- Deploying IBM applications in OpenShift using IBM helm charts and Manifests with ArgoCD
- Implemented secure configurations by passing sensitive data through Secrets and mapping them to ConfigMaps and Deployments and managed secrets using Bitnami sealed secrets
- Implemented ArgoCD to automate and streamline thecontinuous deployment (CD) of applications on Azure Red Hat OpenShift. Configured Azure Repos as the Source Control Management (SCM) for ArgoCD, enabling version-controlled deployments and ensuring traceability of changes
- Doing cluster health checks to ensure cluster status and gathering cluster logs for any issues to debug with Azure support
- Performing rolling restarts and application rollbacks incase of any issues
- Configured application certificates to enable secure communication using TLS.
- Applied Re-encrypt and Edge termination strategies to securely route traffic within the cluster.
- Managed user authentication using Microsoft Entra ID and assigned roles via RoleBindings and ClusterRoleBindings. Configured service accounts with specific ClusterRoles to enforce fine-grained access over pods in OpenShift.

AMFAM - Cloud Engineer

- Managed and deployed EC2, RDS, EBS, ELB resources across dev, staging, and production using Terraform Scripts
- Built scalable network architectures in AWS with VPCs, subnets, NAT/IGW, security groups, and Route 53 DNS.
- Developed automation scripts for scheduled backups of directories, lifecycle policies, and alerting across cloud environment
- Applied firewall and access control configurations in both AWS and Azure, ensuring adherence to security policies.
- Orchestrated cloud migration efforts by moving workloads from Amazon EFS to S3 using AWS DataSync.
- Led deployment and configuration of AWS resources, such as EC2 instances, RDS databases, S3 buckets and Elastic Load Balancers (ELB), using Infrastructure as Code (IaC) tools like Terraform for automated, repeatable, and consistent environments.

- Set up and optimized storage solutions in the AWS Cloud, including provisioning S3 buckets with lifecycle policies and cross-region replication, configuring EBS volumes with proper snapshot and backup strategies, and integrating EFS for scalable, shared file storage across compute resources.

ACHIEVEMENTS

- Recognized as a Innovation Champion for containerisation FileGPS Product and development of end to end helm charts
- Top performer in Dec 2024 for successful deliverables and support for ongoing projects

EDUCATION

B.Tech - Bachelor of Technology Electronics

Bhimavaram Institute of Engineering and Technology

2018-2022

7.3 CGPA

ADDITIONAL INFORMATION

- **Languages:** English, Telugu, Hindi
- **Certifications:** AWS certified Cloud Practitioner, IBM solutions architect for Kubernetes, Certified Kubernetes Application Developer(KodeKloud)