Satish Karengula

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Executive Summary

- Cloud Infrastructure and DevOps Engineer with 11+ years of experience, specializing in **CI/CD, Automation, Infrastructure Management, and Scripting, among other areas**.
- Specialized in banking and finance domain for the past 8+ years, including tenure at **UBS AG Singapore (Swiss Bank)**.
- Proficient in a wide range of technologies including **Terraform, Ansible, Agile methodologies, GitLab, Azure DevOps, Jenkins, SonarQube, Python, Windows, UNIX, PostgreSQL, and MySQL**.
- Skilled in secrets management utilizing **Azure Key Vault, HashiCorp Vault, and AWS Secrets Manager**.
- Knowledge in automating and managing AWS infrastructure, including **RDS, S3, IAM, EC2, ECS, CloudWatch, SNS, SQS, MQ, ELBs, and more**.
- Implemented Network Infrastructure across multiple environments using **Subnets, VNets, Security Groups, and more**.
- Created Infrastructure Automation on Azure and AWS using **Terraform** and deployed containers into infrastructure.
- Established and maintained **K8s/Kubernetes clusters on Azure and AWS**.
- Containerized applications and deployed them on **Azure AKS, AWS ECS, EKS, and storing images in Nexus, ACR and ECR.**
- Demonstrated proficiency in creating complex **Terraform Modules**.
- Developed end-to-end pipelines for **Azure and AWS on GitLab**, facilitating the migration of jobs from Jenkins to GitLab.
- Expertise in log and resource monitoring and alerting across multiple cloud environments, employing tools such as **DataDog, Azure logs, CloudWatch, and Kibana**.
- **Created and Managed playbooks, roles with Ansible** for server configuration and package installations on Windows Server and Linux machines.
- Implemented **DNS mapping, load balancing, health checks, and clusters** for target groups as well as EC2 instances on AWS.
- Created custom hardened EC2 AMIs on AWS and custom images for Azure and Azure Containers.
- Automated **Azure Load Balancers, Storage Gateways, Key Vaults, NSGs, and Virtual Machines.**
- Set up and managed Enterprise **SonarQube** in several teams' CI/CD pipelines.
- Employed Maven for building applications using CI/CD.
- Proficient in scripting languages such as **Bash Shell, and Python.**
- Expertise in Automation, Release Management, and Dashboard Configuration.
- Managed CI/CD pipelines and repositories on **Jenkins, Azure DevOps, and GitLab.**
- Proficient in various Linux distributions such as **CentOS, Ubuntu, and RedHat**.
- Utilized **ServiceNow** for ITIL and Change Requests.
- Conducted training sessions for engineers on the internal tech stack to ensure adherence to SOPs.

Certifications *[click to verify]*

- CKA: Certified Kubernetes Administrator
- AWS Certified DevOps Engineer – Professional
- AWS Certified Solutions Architect – Associate
- Microsoft Certified: Azure Administrator Associate
- Microsoft Certified: Azure Fundamentals

Technical Skills

Working experience with following tools (includes but not limited to):

Cloud providers	:	**Azure, AWS**
CI/CD pipelines	:	**Jenkins, GitLab**
Provisioning tools (IaC)	:	**Terraform, Cloud Formation**
Configuration Management	:	**Ansible, Puppet**
Containerization	:	**Docker**
Container Orchestration	:	**Kubernetes, Azure Kubernetes Service (AKS), Amazon Elastic Kubernetes Service (EKS - AWS)**
Scripting	:	**Python, bash**
Monitoring:	:	**AppDynamics, Splunk, Prometheus, Grafana**
Management tools:	:	**Jira, Confluence**
Operating systems:	:	**Linux, Windows**
Databases:	:	**Oracle, MySQL, PostgreSQL**
Data Representation Language	:	**YAML, JSON**

Work Experience

Senior DevOps Engineer

UBS AG (April 2020 – April 2024) – Singapore.

➢ Designed and implemented Terraform modules and templates to provision and manage Azure infrastructure, including virtual machines, storage accounts, virtual networks, and Kubernetes clusters.
➢ Automated deployment and configuration of Azure resources using Ansible playbooks, ensuring consistency and repeatability across development, staging, and production environments.
➢ Developed CI/CD pipelines in GitLab and Azure DevOps for automated build, test, and deployment of applications, integrating with Git repositories and artifact repositories like Azure Artifacts.
➢ Orchestrated containerized workloads with Kubernetes on Azure, including deployment, scaling, and management of microservices-based applications using Helm charts and Azure Kubernetes Service (AKS).
➢ Utilized Azure Monitor and Prometheus for monitoring Azure infrastructure and applications, configuring alerts, dashboards, and metrics to proactively identify and troubleshoot issues.
➢ Implemented infrastructure-as-code practices with Terraform and Ansible to maintain version control, track changes, and ensure infrastructure consistency and compliance with company standards and policies.
➢ Integrated security best practices into Azure environments, including network security groups (NSGs), role-based access control (RBAC), encryption at rest and in transit, and security compliance checks with Azure Security Center.
➢ Automated routine administrative tasks and operational procedures using bash and python scripts, improving operational efficiency and reducing manual effort for system administration and maintenance.
➢ Collaborated with development teams to optimize application performance and reliability on Azure, analyzing application logs, database queries, and system metrics to identify bottlenecks and optimize resource utilization.
➢ Provided technical guidance and mentorship to junior team members, sharing best practices, conducting knowledge-sharing sessions, and fostering a culture of continuous learning and improvement within the team.
➢ Contributed to the development of internal tools and frameworks to streamline DevOps processes, improve productivity, and enhance the overall developer experience on Azure.
➢ Participated in on-call rotation and incident response activities, resolving production incidents and outages promptly, conducting post-mortem analyses, and implementing preventive measures to minimize future incidents.

DevOps Engineer

UBS AG (June 2016 – April 2020) – from Infosys Ltd – Singapore.

➢ Built continuous integration and continuous deployment (CI/CD) pipeline templates using Jenkins, GitLab.
➢ Configuring and supporting the DevOps tools including Git, GitLab, maven, Ansible, Puppet, Nexus Artifactory, SonarQube.
➢ Written Ansible playbooks with Jinja2 templates (dynamic configuration) for deployments on both on-premises and Cloud platforms like Azure and AWS.

- Generated reports using Python Scripts, presented to management for infrastructure review and cost optimization.
- Presented organizational Cost utilization and helped reduce cloud infrastructure costs.
- created firewalld configuration using puppet for ensuring additional security of servers.
- Automated installation of patches and package management using RPM and YUM in RedHat Linux using Ansible playbooks.
- Participated in deploying, automating, maintaining and managing Azure cloud and AWS based production systems to ensure the availability, performance, scalability and security of productions systems.
- Integrating applications with monitoring tools like AppDynamics, Splunk, Prometheus, Grafana.
- Involved in redesigning Monolithic application to micro services, deployed and orchestrated them using Kubernetes, Pivotal Cloud Foundry.
- Participate in the Agile DevOps design, development, testing, and release of new capabilities and features.
- Worked closely with key stakeholders including developers, architects and project managers across all stages of deployment such as Integration, Test, Staging and Production.
- Proactively communicate and coordinate with multiple project teams.
- Created one-click developer environment using WSL for developers.
- Implemented templates versioning for Gitlab pipeline templates.

Systems Engineer

Microsoft (February 2013 – June 2016) – from Infosys Ltd – India.

- Worked on Microsoft Volume Licensing suite of applications.
- Worked on Administration, installation and maintenance of the physical and virtual IT infrastructure.
- Responsible for application availability and stability and perform maintenance activities.
- Worked on application deployments to on-premise servers.
- Responsible for conducting Linux Servers OS patching, Middleware patching, Certificate handling and ensuring smooth application experience to end users.
- Responsible for handling and driving Incidents on PRODUCTION and TEST environments, following up for permanent fixes (Problem Management) with Development teams.
- Proactive monitoring of applications using Wily, Splunk, Abilisoft, Kibana, etc.
- Responsible for solving bottlenecks in Infrastructure like high utilization of CPU, Disk, Memory, JVM Heap etc.
- Worked on Autosys scheduler for End of the day (EoD) and Start of the Day batch jobs.
- Involved in Release Management/Change Management activities such as gatekeeping the deployments to TEST and PRODUCTION systems.
- Automated several operational tasks using Python and Bash scripting.
- Knowledge in Networking, Firewalls, Load Balancers, Proxies, Web and App Servers, Message Streaming, Databases, etc.

Education

- **Bachelor of Engineering (2008 to 2012)** with distinction from Vasavi College of Engineering (affiliated to Osmania University), Hyderabad, Telangana, India.

- Satish Karengula