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**VIDHYALAKSHMI RAVIKUMAR**

**CLOUD ENGINEER | DEVOPS ENGINEER**

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**PROFESSIONAL SUMMARY**

* Experienced DevOps Engineer with 10+ years of experience in **Infrastructure management** and AWS Cloud Services,Design & Engineering, CICD pipeline, automation in Infra stack creation and configuration management on both cloud and on-premise environments, Cloud Migration, in-depth system and application metrics monitoring and Unix Administration.
* Experience in architecting and Configuring public/private cloud infrastructures utilizing Amazon Web Services (AWS) including EC2, Elastic Load-balancers, Elastic Container Service (Docker Containers), S3, CloudFront, RDS, DynamoDB, VPC, Direct-Connect, Route53, Cloud Watch, Kinesis, Cloud Formation, IAM.
* Fully hands-on on Infrastructure as a Code (IaaC) tools including Terraform and Cloudformation
* Developed multiple modules on configuration managements tools in like Ansible (with python boto3)
* Experienced in creation and management of Continuous Deployment Pipeline including Jenkins.
* Specialized in building tools for Service/application health check monitors and Auto healing mechanism also leveraging the tools like Splunk, ELK, Datadog etc.
* Working relentlessly to align IT strategy with the company's objectives, reducing costs, improving architecture, reporting to stakeholders and management, training and guiding employees regarding information technology issues.
* Designed, configured, managed, and maintained the deployment and operations using Amazon services and used CloudWatch and Splunk for monitoring.
* Working knowledge of dockerized deployment of web services to AWS stack.
* Experienced in creating and managing CMDB with IT assets including tickets and change orders on tools like Servicenow and BMC remedy.
* Experience with Source Code Management (SCM) tools like Subversion (SVN), GIT/

GITHUB.

* Expertise in AWS Identity and Access Management (IAM) components, including concepts like trust relationships, cross account accesses and conditional policies to allow restricted accesses.
* Managing RBAC (Resource Based Access Control) for S3 bucket,KMS Key, VPC endpoints,SNS topic by IAM Access/resource policies
* Hands on migration experience of on-prem web services to AWS stack.
* Worked with Docker and Kubernetes on multiple cloud providers, from helping

developers build and containerize their application (CI/CD) to deploying either on public

or a private cloud.

* Used Git for source code version control and integrated with Jenkins for CI/CD pipeline, code quality tracking and user management with build tools Maven and Ant.
* Understand and document technical requirements from clients.
* Ability to design the AWS network architecture including and designing the strategies.   
  Oversee the build of the environment and execute a migration plan.
* Leverage appropriate AWS services and validate the environment to meet all security and compliance controls.
* Designed, developed, and deployed AWS services as Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS).
* Hands-on experience with monitoring tools (Splunk, Datadog, etc.)
* Drive the technical design of AWS solutions by working with customers to understand their needs.

Deployed and configured Atlassian tool JIRA for both hosting and issue tracking for local instances, workflow collaboration, and tool-chain automation, also used Remedy for bug tracking.

**TECHNICAL SKILLS:**

* **Amazon Web Services**: ROSA, EKS, ECR, ECS, EC2, EFS, AWS Auto Scaling, S3, Route53, SNS, IAM, ACM, VPC, TGW, APIGW, WAF, Shield, Cloud formation, cloud watch, AWS SM.
* **Containers Orchestration**: Kubernetes, EKS, ECS, OpenShift ( 3.x, 4.x and ROSA ) , Docker
* **DevSecOps CI /CD** : Jenkins, GitHub, SonatypeNexus ( Nexus Repository Pro, Nexus Firewall, Nexus lifecycle) , SonarQube, CheckMarx, Prisma
* **Build Tools**: Maven, Ant, Npm, s2i , Terraform
* **Automation & Configuration Management** : Ansible, Ansible Tower, Bash Scripting, Terraform
* **DevOps Tools**: Jira, Confluence, CloudHealth, NewRelic, Slack

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| **PROFESSIONAL CERTIFICATIONS**  ▪ AWS Certified Developer - Associate  ▪ RHEL7 Certified System Administration  ▪ IBM Certified Specialist on AIX 7.1 |

**Professional Experience**

**Jobuli Technologies, Richmond, VA Sep 2020 – Till date**

**Role : AWS/DevOps Engineer  
  
Responsibilities:**

* Creating fully automated CI build and CD deployment infrastructure and processes, developing scripts for build, deployment, maintenance, and related tasks using Jenkins, Docker, Python, and Bash
* Build and manage owt (open webrtc) deployment of CentOs Linux instances with Shell Scripts, Ansible, and Terraform and Automated webrtc build and generate artifacts and deployments with Jenkins Pipelines and used Ansible to manage Config Files Modifications, Custom tasks, Users, Mount Points, and Packages.
* Implemented a Continuous Delivery pipeline with Docker, Jenkins and BitBucket, and AWS AMI
* Have experience in working with Docker- docker hub, AWS ECR, pulling images, running containers based on an image, creating Dockerfile to manage customized containers, exposing a container with a port redirect with ingress, container volume management, docker inspect, docker, commit to capturing the file changes/settings into a new image and pushing the image to docker hub/AWS ECR
* Automated AWS components like VPC, S3, EC2 instances, Security groups, ELB, RDS, IAM, and other services through Terraform.
* Automated Python code and container image deployments to Lambda Functions with terraform
* Managed the new container image rollouts to Lambra functions from AWS ECR and configured triggers, Environment variables, File system(EFS) and other configurations integration with terraform.
* Creating Lambda function/Shell Scripts to automate snapshot backup on AWS and set up the scheduled backup for EBS, RDS, and ElastiCache.
* Automate provisioning and repetitive tasks using Terraform and Python, and Shell Scripts. Trigger these tasks from Jenkins Server.
* Create develop and test environments for multiple applications by provisioning Kubernetes clusters on AWS (EKS) using Docker, Ansible, and Terraform
* Deploy the containers to Kubernetes (EKS) by Calling ArogoCD APIs from BitBucket Pipelines and set up the ArgoCD server to implement the CI&CD Microservice deployment management with helm
* Experience designing and deploying AWS Solutions using EC2, S3, EBS, Elastic Load balancer (ELB), and auto-scaling groups.
* Experience in creating alarms and notifications for EC2 instances using Cloud Watch.
* Utilize Cloud AMQP to integrate microservices with other microservices and RabbitMQ messaging exchanges.
* Experience with ElasticSearch, Logstash & Kibana stacks.
* Experience with Nagios/Prometheus/Grafana/Zabbix monitoring and alerting services for servers, switches, applications, and services.
* Worked closely with developers and managers to resolve the issues that were raised during the deployments in different environments.

**COGNIZANT Technologies, Chennai, India Oct 2015 – Feb 2018**

**Role : AWS Cloud Engineer**

**Client: Liberty Mutual Insurance & Hanover Insurance Jan 2017 - Feb 2018**

* Developed Terraform scripts to launch EC2, S3, Load Balancing, IAM, VPC, Lambda, and Cloud Watch.
* Used AWS Route53, to route the traffic between different availability zones. Deployed and supported Mem-cache/AWS Elastic-Cache and then Configured Elastic Load Balancing (ELB) for routing traffic between zones.
* Working closely with Cassandra loading activity on history load and incremental loads from Teradata and Oracle Databases and resolving loading issues and tuning the loader for optimal performance.
* Responsible for implementing monitoring solutions in Ansible, Terraform, Docker, and Jenkins.
* Designed and worked with a team to implement ELK (Elastic search, Log stash and Kibana) Stack on AWS.
* Migrated the production SQL server schema to the new AWS RDS Aurora instance.
* Wrote SQL queries and worked on administration for optimizing and increasing the performance of the database.
* Installed and administered Docker and worked with Docker for convenient environment setup for development and testing.
* Create develop and test environments of different applications by provisioning Elastic Kubernetes clusters on AWS using Docker, Ansible, and Terraform
* Setting up the build and deployment automation for Terraform scripts using Jenkins.
* queue manager; Design, improve and maintain Python and Shell scripts for seamless Domain Creation and application deployment.
* Capacity analysis - proactive infrastructure scale up by onboarding servers, clusters and services to meet future requirements or decommissioning/reuse the same for other applications thereby saving cost.
* Playing key role in Design Review Board to assess flaws, backward compatibility and to make sure no impact to existing Infrastructure due to a new component or new version during the initial stages of deployment.
* Used Git as Source Code Management and Artifactory for highly available docker registries.
* Worked on Docker for containerization of web services.
* Worked on Jenkins for Continuous Implementation and Deployment.
* Used ServiceNow for productive workflow management and incident management.
* Used VPC and ELB for balancing the traffic load between multiple EC2 instances deployed (using automation with ansible) across multiple AZs.
* Worked on Identity and Access Management creating policies,groups and roles as and when required based on client specifications.

**Role : AWS Cloud Engineer**

**Client: CITIBank Oct 2015 - Jan 2017**

**Responsibilities:**

* Completely Automated BUILD and DEPLOY pipelines for many small stand-alone applications by creating multiple CHEF cookbooks and recipes for cloud and using shell and python scripts with scheduler for legacy on-premises servers.
* Creating pipelines for ECS Cluster and standalone ELB-ECS stacks creation there by aiding application teams to build and deploy their apps.
* Infrastructure development involving 300+ Linux Server,120+ Network Clusters with servers deployed on physical Datacenter.
* Worked as an Automation Developer and simplified many UNIX manual tasks using configuration management tools such as Ansible.
* Setting up a huge Kubernetes platform with four clusters and aiding various app teams and Kubernetes dashboard to access the cluster via its web-based user interface.
* Automated AWS components like VPC, S3, EC2 instances, Security groups, ELB, RDS, IAM, and other services through Terraform.
* Deploy the containers to Kubernetes (EKS) by Calling ArogoCD APIs from BitBucket Pipelines and set up the ArgoCD server to implement the CI&CD Microservice deployment management with helm
* Experience designing and deploying AWS Solutions using EC2, S3, EBS, Elastic Load balancer (ELB), and auto-scaling groups.
* Experience in creating alarms and notifications for EC2 instances using Cloud Watch.
* Experience with ElasticSearch, Logstash & Kibana stacks.
* Experience with Nagios/Prometheus/Grafana/Zabbix monitoring and alerting services for servers, switches, applications, and services.
* Installed, monitored, and configured Applications in Nginx and Apache Tomcat Server and established connectivity to databases and troubleshoot issues on the fly.
* Experience using Ansible Tower dashboard, role-based access control, access to Ansible for deployments.
* Experience in working with Ansible Playbooks to automate various deployment tasks and working

knowledge on Ansible Roles, Ansible inventory files and Ansible Galaxy.

* Experience in Branching, Merging, Tagging and Maintaining the version control and source code

management tools like GIT, SVN and Bitbucket on Linux and windows platforms.

**WIPRO TECHNOLOGIES, Chennai, India Apr 2011 – Oct 2015**

**Role : UNIX SYSTEM Administrator**

**Client: Ascena Retail,NESTLE  
  
Responsibilities:**

● Playing Key role in Data Centre Migration from Bensalem to Ohio

● Worked on Vio Upgrade project,ESX Firmware upgrade.

● Server hardware profile management to add the hardware like CPU & memory addition

in Linux Virtual machines.

● Worked on OS Hardening and updating security patches.

● Backing up Linux server using dd command and restoring on rescue or single user mode.

● Troubleshooting OS related boot issues.

● Samba clients and Servers Installation and configuration.

● Managing log files, errpt, Daily Management activities performing health checks, file

restoration from backup.

● Performed all the Logical Volume Manager (LVM) operations including disk addition,

file system expansion.

● Patched over 2500 Linux 6.6 servers and performed AIX migration from 6.3 to 7.1 version.

● Configuring NFS by automount system from various servers.

● Deployed Veritas cluster migration activities and Veritas failover activities.

● Experienced on crontab schedulers and shell scripting to quantify the system automation

● System User-Id and SUDOers management.

● Consistently meet deadlines on the problem Resolution. Communicate regularly the

status and direction on works in progress.

● Provided SEV1 and SEV2 support on various OS and hardware related issues.

● Performance analysis using perfpmr and nmon, topas, svmon and SAR utilities.

● Played a key role in providing transition of complete environment to new client about the

environment.

● WebServer configuration using httpd,ntp Server and client configuration.

● Server management using HP Proliant (ILO’s)