

**Venkata Ramesh Chandu**

**PROFESSIONAL SUMMARY**

* Sr. DevOps Engineer with 14+ years of experience in Software Configuration Management (SCM), optimizing deployments in AWS, Automation, Integration, design, and development of various use cases as per the business needs.
* Strong experience using various open-source technologies to ensure the best practices of DevOps methodologies.
* Hands on experience in configuration & Performance tuning, Patching, Installs, Upgrades, Problem Management, Patch Management, Incident Management, Change Management, Troubleshooting & OS Maintenance.
* Extensive experience in Jenkins, Bamboo, Run deck, Artifactory, Puppet, RabbitMQ, Git, GitHub, Oracle/Cassandra, Chef, Kafka, ELK, Dynatrace, Kibana, Logstash, Kubernetes, Docker, Service Now, Concourse, PCF, EC2, ECS, S3, Load balancer, Code Build, Code Deploy, Code Pipeline, SonarQube.
* Experienced creating Docker files, reducing the build time, cutting down the layers, creating multistage files and creating the Docker compose files.
* Creation of code build, code deploy and code pipeline via console and automation through terraform.
* Extensive experience in Branching, Merging, and Tagging in SCM tools like Git, GitHub, Gitlab and SVN.
* Extensively involved in infrastructure as code, execution plans, resource graph and change automation using Terraform. Managed AWS infrastructure as code using Terraform.
* Good experience with maintaining and operating the running production systems in AWS.
* Maintained and developed Docker images for a tech stack including Cassandra, Kafka, Apache, and several in house written java services, running on Kubernetes.
* Experience working on micro services deployments using Kubernetes.
* Setting the load balancers, security groups, Ingress on pods of Kubernetes.
* Experienced in Configuration Management, Infrastructure Automation tools like Chef, Puppet.
* Good understanding of how to use GitHub actions in CICD pipelines.
* Experienced in configuration management with software provisioning tool Puppet for JBoss, Java, JMS, Apache, and Sterling projects.
* Expertise in the building of deployment Artifacts such as war, ear and jar from source code using Maven. Experienced in working in Linux and Windows environments.
* Experienced in scripting languages on modifying and understanding Shell, Python, Groovy and YAML.
* Good understanding with products such as: GitHub Actions, Octopus Deploy, AWS, TeamCity
* DevOps practice for Microservice and Docker based cluster using Kubernetes and spinnaker as Orchestrator on application development for cloud platforms using Spring boot, Micro services.
* Provisioning various AWS components and open-source technologies by Infrastructure as a code (Iac) using terraform, ansible, chef, cloud formation etc.
* Used monitoring tools like Splunk, Nagios, Configured, and Managed Monitoring Tools such as Nagios for Resources Monitoring/Network Monitoring/Log Trace Monitoring.
* Cost optimization for Aws services and build Serverless Architecture by using Lambda functions, STEP Function, Athena, Glue, S3, Cloud Watch and Cloud Metrics.

**PROFESSIONAL EXPERIENCE**

**Byte Dance, New York, NY 10036 (Mar 2022 - Present) Sr. DevOps Engineer with Kubernetes**

**Responsibilities:**

* Involved in Designing, Program Increment planning, Sprint planning, Review Sessions, Scrum meetings and Development of Use cases which will be benefit to the business.
* Extensive experience on the Docker Files, to reduce the Docker image disk utilization by cutting down the layers.
* Implement multi-stage build to reduce the build time utilized.
* Create jobs on AWS Code Build, by utilizing the source from Git, pulling, and pushing the images from ECR.
* Creation of AWS code build Code Deploy and Code pipeline jobs.
* Deploying the applications using Kubernetes as an Orchestrating tool. Writing automation scripts using shell/Python Scripting
* Setting up Kubernetes clusters, configuring and managing nodes, or installing and managing Kubernetes services using EKS.
* Implementing the infrastructure via terraform for creation of code pipeline jobs.
* Creation of VPC’s, Subnets, Load balancers.
* Developed Python and Shell scripts for automation of the build and release process. Wrote automation scripts in shell and Python to enhance the CI-CD pipeline.
* Creating the roles and adding policies as per the need of requirements.
* Multiple job creations on Code Build to create the base image, Multi base image, Multistage build, separate ECR repositories as per the projects applications and setting up the permissions.
* Transformation of current code deployed from Jenkins into AWS Code Deploy. Deployment transformation from EC2 to ECS and setting up the cluster of ECS through terraform.
* Good experience in writing cloud formation templates and terraform modules for all the AWS resources
* Designed compliance workflow with Matter tool to scan the Terraform resources.
* Compliance workflow scans the Terraform resources and provides non-compliant and compliant resources.
* Creating the code pipeline and triggering multiple jobs of code build and code deploy.
* Help Development teams automate the environment setup using tools like Ansible.
* Wrote the ansible playbooks for deploying the apache-tomcat and different applications on various environments.
* Writing the ansible playbooks using ansible roles.
* Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test deploy on EKS clusters.
* Designed and distributed private cloud system solution using Kubernetes (Docker) on CoreOS and used it to deploy scale, load balance and manage Docker containers with multiple names spaced versions, and worked on Docker Engine, Docker HUB, Docker Images, and Docker Compose for handling images for installations and domain configurations.
* Using the Helm Chats we can deploy and configure the applications.
* By using kubeBuilder to develop Kubernetes Operators. It provides scaffolding for creating and managing Operators, and it hides much of the complexity of interacting with the Kubernetes API.
* Developed CI/CD system with Jenkins on Kubernetes container environment, utilizing Kubernetes and Docker for the runtime environment for the CI/CD system to build and test and deploy On managed EKS.
* Act as a subject matter expert on DevOps best practices with Cloud Formation, Auto Scaling Groups, and Configuration Management.
* Perform analysis best practices and emerging concepts in DevOps, Infrastructure Automation, and Enterprise Security.
* Implemented a Continuous Delivery framework using Jenkins, Maven & Nexus in the Linux environment.
* Administration and support of JIRA, Confluence, and related plug-ins and Atlassian products. Maintained JIRA Administration/User documentation in Confluence.
* 24/7 on call supports for emergency site maintenance and immediate build and install requests.

**Environment*:***

Docker, Kubernetes, kubebuilder,kubernetes controller and golang,Kibana, Kafka, Chef, terraform, AWS, ECS, EC2, S3, RDS, VPC, cloud watch, SNS, Jenkins, bamboo, bitbucket, chef, Talend, rally, Jira, Kanban board and GIT and GitHub actions.

**Sayway LLC, Miami, FL (Jun 2020 – Feb 2022)**

**DevOps with AWS and Kubernetes admin**

**Responsibilities:**

* Setting up the Project/Applications Infrastructure using cloud platforms (AWS)
* Setting up the CI-CD Pipelines using Jenkins
* Install TeamCity server and then configure a continuous integration pipeline for a simple Java Gradle project that builds a Docker image and pushes it to a private DockerHub registry.
* Deploy the microservices by using the CI-CD pipelines on mangned EKS services.
* Experience with hardening EKS Security for Cluster and Applications.
* Trigger builds on a remote TeamCity server from your local development environment.
* Containerizing the Applications using Docker and deployed on AWS EKS cluster.
* Setting up Infrastructure as Code (IaC) using Terraform.
* Working with many ansible modules as per required as written role for reusable purposes like jdk installation, maven installation and fortify installation
* Using the Build and Versioning tools (Ant, Maven, Gradle, Git)
* Handling the different operations using ansible ad-hoc commands.
* Create modules for deployment automation.
* Deploy serverless functions and manage them using an API gateway.
* A set of definitions and protocols to build and integrate application software by using API Gateway.
* Installing the Monitoring tools for the developed applications to monitor all the processes etc using Nagios.
* Worked on Amazon EC2, Amazon S3, Amazon RDS, Elastic Load Balancing and Cloud Watch.
* Creating new EBS volumes and attaching the same to EC2 instances when needed.
* Helm is a package manager for Kubernetes that provides package, install, and upgrade a set of YAML files for Kubernetes as a unit.
* Created the VPC’s, configured the subnets, attached the gateway and routing tables to the subnets and deployed the EC2 instances in the subnets created.

**Environment:**

AWS Cloud Services, AWS billing, Circle CI, GitLab, Dockers & Kubernetes.

**Assurant Solutions, Miami, FL (Jul 2014 – Dec 2019) SRE Lead with AWS and Kubernetes admin**

**Responsibilities:**

* Worked along with teams to create the checklist for performance and production deployments.
* Setting up the Production/Perf environment for the micro services-based applications.
* Continuous production support for the end client.
* Deployment of micro services on Kubernetes.
* Setting up the security groups, load balancing and Ingress creation on Kubernetes.
* Creating the SSL certificates for the application to do the endpoint or rest API calls.
* Installed the file beats for collection of application logs on containers along with application deployment in Kubernetes.
* Maintenance and creation of config map and secret tokens on Kubernetes.
* Involved in installation of one agent of Dynatrace on the Kubernetes cluster nodes.
* Maintenance of Kubernetes overlay network Calico.
* Creation of containers and setting up values along with the environment variables on deployment YAML.
* Scaling and auto scaling of the pods on Kubernetes, troubleshooting any issues on pods.
* Performance testing – load testing for the applications before the release.
* Design, Implement and use Scripting, and a wide range of tools for automation, reliability, and quality improvements of the release process.
* Help automate and streamline the operations and processes and troubleshoot and resolve issues in the Dev, Test and Production environments.
* Supported developers and QA engineers on the release process and deployments to various environments like DEV, QA, UAT, PROD.
* Code the infrastructure using the configuration management tool CHEF, to automate the provisioning of
* Deployed applications on to EC2 Instances using Chef Cookbooks, Recipes.
* Perform system Administration, coding for Automation, Deployment, and Troubleshooting on the cloud platform Azure and Linux operating system.
* Support application deployed on Containerization technologies using Docker, deployed through Spinnaker on Kubernetes on ACS.
* Helm is a package manager for Kubernetes that provides package, install, and upgrade a set of YAML files for Kubernetes as a unit
* Support issues with Cassandra DB and support application configuration for Hadoop.
* Develop tools for production environment and metrics collection and deployment status monitoring with Dynatrace.

**Environment**: AWS, EC2, S3, RDS, VPC, cloud watch, Chef, SNS, azure, Jenkins, bamboo, bitbucket, Dynatrace Docker, Kubernetes, Helm chats,golang,ira, Kanban board

**Prudential Inc, Newark, NJ (Jan 2013 – July 2014)**

**DevOps Engineer**

**Responsibilities:**

* Worked with developers in establishing and applying appropriate branching, labelling / naming conventions using GIT source control.
* Dev, QA, and Production environment and manage their configurations.
* Demonstrate strong communication skills and collaborate with all participants in web development projects.
* Started from the setup to work on AWS for the roles and grouping through IAM, created inbound and outbound traffic control. Set up SNS, AWS backup through AWS direct connects.
* Created the different AWS resources by using Terraform as IAC.
* Worked with the development team to move the AMI's Amazon Machine Images into the S3, by allowing hosts on the ports.
* Monitored the cloud health of instances with Elastic Beanstalk for connection draining.
* Configured various cloud services EC2, ELB, Elastic IP, RDS, SNS.
* Configured CI/CD using GitHub, maven, NodeJS, Jenkins, SonarQube, on AWS.
* Created/Configured EC2 Instances in AWS and installed required packages.
* Created/configured RDS instances in AWS with Multi-AZ deployment.
* Created EBS volumes for EC2 instances and moved snapshots in a timely manner to S3 bucket using custom Shell script.
* Created Topics, Avro schema and managed Kafka with Zookeeper.

**Environment**: GIT, SVN, Ant, Jenkins, Chef, Puppet, Docker, Terraform, Tomcat, Confluence.

**Gilead Sciences, Inc, Foster City, CA. (Oct 2011 – Dec 2012) DevOps Engineer with Linux admin.**

**Responsibilities:**

* Automating infrastructure management and configuration with Chef.
* Setting up the environment from individual developer environments through to production. Writing custom modules as per the client’s requirements.
* Debug existing automation code and test to confirm functionality.
* Create modules for deployment automation.
* Create documentation for Chef best practices to be used by developers as a guide to Chef Automation.
* Work directly with customers to ensure their deployments are secure, reliable and scalable.
* Installation of patches and packages using RPM and YUM in Red hat Linux
* Administered Linux servers for several functions including managing Apache/Tomcat Server, Mail Server, and MYSQL databases in both development and production.
* Expert in installing, configuring and maintaining Apache/Tomcat.
* Creating Mounting and Troubleshooting NFS files with different OS platforms.
* Linux kernel, memory upgrades and swaps area. Red Hat Linux kickstart installation.
* Capacity Planning, Infrastructure design and ordering systems.
* Attended team meetings, change control meetings to update installation progress, and for upcoming changes in the environment.
* Updated data inventory management package for Software and Hardware products.
* Worked with DBAs on the installation of RDBMS database, restoration and log generation.
* Bash shell scripts to automate routine activities.
* Monitored trouble ticket queue to attend user and system calls.
* Collaborated using Atlassian tools including Jira, Confluence and GIT.
* Provided 24\*7 on call production support and resolved tickets.
* Installed and configured MS SQL server and Oracle in Linux server.

**Environment**: AWS, Chef, Jenkins, Linux, Windows, Cognos BI and SQL server.

**Princeton Financial Services, USA (Oct 2008 – Aug 2011) Cognos Developer with BI Admin**

**Responsibilities:**

* Efficiently worked on Models, Namespaces, Folders, Query Subjects and Packages from Multiple data sources in cognos8 Framework Manager
* Worked on scheduling and publishing reports to the Cognos Connection
* Worked with conditional variables to highlight the data based Reporting requirements
* Extensively worked with Report Studio like list report and line charts
* Created various lists, grouped lists and cross tab reports using Cognos Report Studio
* Created drill through reports, master-detail reports using parameterized filters
* Created filters, prompts, to customize the package for different report authoring.
* Enhanced and maintained reporting applications

**Environment**: Cognos 10 BI, Oracle 9i, IBM Cognos data manager and Windows NT/2000

**EDUCATION**

* Bachelors in Computer Science -University of Madras, India 2004

**CERTIFICATIONS**

* AWS Certified Solutions Architect – Associate
* Certified Kubernetes Administrator