Prabhu Kumar Vemisetty

**Certifications:**

* AWS Certified DevOps Engineer – Professional.
* AWS Solutions Architect – Professional
* Certified Kubernetes Administrator (CKA)

**Professional Summary:**

* A Cloud enthusiastic team player having around 11+ years of Experience in IT industry as a DevOps and Data Engineer with proven expertise in Automation, Build/Release Engineering and Software development involving cloud computing platforms like Amazon Web Services (AWS) and Google Cloud (GCP).
* Develop, enhance, and maintain the build, deployment and configurations for continuous integration and automate regression and acceptance testing.
* Experience in collecting metrics for Hadoop clusters using Ambari, AWS, & Cloudera Manager.
* Deployed Infrastructure from end to end by using terraform templates.
* Experience in Linux/Unix environment (RHEL, CentOS, and Solaris).
* Experience in Cloud Foundry (BOSH)
* In-depth knowledge on various AWS Services including EC2, VPC (NAT, Peering, VPN), IAM, EC2 Container service, Elastic Beanstalk, Lambda, S3, CloudFront, Glacier, RDS, DynamoDB, Elastic Cache, Redshift, Direct Connect, Route 53, CloudWatch, CloudFormation, CloudTrail, Opsworks, Amazon Elastic Map Reduce (EMR), AWS IoT, SNS, SQS, Lambda, API Gateway etc.
* Well versed in installing, upgrading & managing Apache, Cloudera (CDH4, CDH5), Hortonworks distributions and Amazon Web Services (EMR) for Hadoop.
* Proficient with container systems like Docker and container orchestration like EC2 Container Service, EKS (Kubernetes), worked with Terraform.
* Good knowledge and experience using AWS Lambda for Server-less computing using Python and Java.
* Excellent background in development and architecting applications
* Implemented Continuous Integration and deployment using various CI Tools like Jenkins, Hudson Bamboo, Ansible, Puppet and Sona type Nexus.
* In-depth knowledge of computer applications and scripting like Shell and Python.
* Worked in an agile development team to deliver an end-to-end continuous integration/continuous delivery product in an open-source environment using tools like Chef and Jenkins.
* Advanced knowledge in troubleshooting operations issues, finding root causes faced in managing Hadoop clusters.
* Hands on experience in provisioning and managing multi-tenant Hadoop clusters on public cloud environment –using OpenStack cloud platform.

**Technical Skills:**

Configuration Management Tools : Puppet, Ansible

Version Control System : Subversion (SVN), GIT, GITHUB, CVS and SVN

Build Tools and IDE : MAVEN, ANT, Eclipse

Languages : Shell Scripting, Python

CI tools : Jenkins/Hudson, Bamboo

BigData Technologies : Map Reduce, HDFS, Hive, Pig, HBase

Operating Systems : Linux (Ubuntu), RedHat

Web/Application Servers : Apache, Tomcat, Nginx

Infrastructure Management Tools : Nagios, Data Dog, New Relic

Load Balancing : HAProxy, Aws Autoscaling

Databases : SQL Server, MySQL, ParAccel, Redshift

Containers : Docker, EKS, S3, Glacier.

Testing tools : Postman, SOAP UI, JUnit, Selenium.

Bug Tracking Tools : Bugzilla, JIRA

Provisioning Tools : CloudFormation, Terraform

No-SQL: : Cassandra

DevSecOps/Security : Hashi Corp Vault, Notary, Veracode, Sonar Cube, AWS Inspector, AWS Security Hub

**Professional Experience: Feb 2014 to Till-Date**

**Sr.Cloud/DevOps Engineer**

**Client: Warner Music Group New York, NY**

**Environment:** AWS, Data pipeline, S3, Redshift, Jenkins, RDS, EMR, EC2, EKS (Kubernetes), GCP, Ansible, Snowflake, AWS Inspector, Security Hub, Cloud foundry, Docker, RabbitMQ, ES, DataDog, New Relic, Terraform, CloudFormation, JUnit, REST API’s, Nexus, ECR, Nagios, Tableau, Grafana.

* Experienced in using and configuring AWS services such as EC2, ELB, EBS, RDS, Cloud watch, Auto-scaling, IAM, Route 53, Dynamo DB and S3.
* Experience in writing Docker file Building and deploying docker images/containers to ECS cluster with Tasks and troubleshooting.
* Continuous Integration /Delivery is being enabled through Deployment into several environments of Test, QA, Stress and Production using Jenkins and Nexus.
* Responsible to create various Cloud Watch alarms that sends an Amazon Simple Notification Service (SNS) message when the alarm triggers.
* Experience on code refactoring the design of existing code, without changing its behavior and extending their code a lot from iteration to iteration, and without continuous refactoring.
* Installed application on AWS EC2 instances and configured the storage on S3 buckets.
* Configures infrastructure builds using AWS Cloud Formation Templates and used Ansible Playbooks to automate the Hadoop cluster setup without any manualintervention.
* Wrote Python and Bash scripts for system administration and automation, such as automate the regular tasks like removing core files, taking backups of important files, file transfers among servers, etc.
* Involved in the security architecture, security tools, techniques, methodologies to implement secure development and production environment in cloud/containers platform on PaaS.
* Involved in development of Prod environment on Docker containers and configuring the Docker containers using AWS EKS (Kubernetes). Created Pods and managed using Kubernetes.
* Created develop and test environments of different applications by provisioning Kubernetes clusters on AWS using Terraform.
* Experience with installation, configuration and maintenance in CI technologies like GitLab/Bamboo/Jenkins/ performing end to end automation for builds and deployments.
* Automated the end-to-end deployment with help of Amazon VPC, Amazon EC2, AWS CloudFormation and Jenkins. Authored templates to describes infrastructure to be deployed.
* Deployed serverless application with service as ECS Fargate, ECR.
* Implemented all the build and deployment scripts which execute the automated CI and release management process.
* Experience in creating Playbooks for automating the process and running them using Ansible.
* Worked on AWS Inspector to scan the instances by using templates from AWS systems manager.
* Experience in Notary security tool to scan the docker containers by using CI/CD pipeline.
* Deployed RDS, EC2 instances and SG’s by using terraform templates.
* Designed, configured and managed public/private cloud infrastructures utilizing Amazon Web Services and experienced in creating Amazon EC2 instances and setting up security groups and Configured Elastic Load Balancers.
* Migrating an entire oracle database to Big Query and using of Tableau for reporting.
* Experience in process by pulling data from YouTube API’s using Google pub/subtopic to Big Query using cloud Dataflow with Python.
* Have experience in pushing new/updated code deploy applications to Cloud Foundry.
* Focused on automation and continuous integration. Automated local development environment using Ansible.
* Worked on google cloud platform (GCP) services like compute engine, cloud load balancing, Cloud Storage, Cloud SQL, stack driver monitoring and cloud deployment manager.
* Automated activities like getting complete cloudbees Jenkins environment configuration details using Jenkins.
* Experience in creating alarms and notifications for EC2 instances using Cloud Watch.

**Hadoop Admin/System Admin** **June 2012 to Feb 2014**

**Client: Cisco Systems Inc. San Jose, CA**

**Environment**: Hive, Cloudera Hadoop Distribution (CDH4), Cloudera Manager, MapR, Puppet, Ganglia and Nagios, Jenkins.

* Designed and deployed Hadoop cluster that can scale to petabytes.
* Commissioned Data Nodes when data grew and decommissioned when the hardware degraded.
* Installed and configured Ganglia and Nagios to monitor Hadoop clusters.
* Managed Hadoop clusters using Cloudera Manager.
* Installed and configured Apache Webserver, Application Server, and Oracle databases.
* Worked closely with data analysts to construct creative solutions for their analysis tasks.
* Conducting root cause analysis and resolve production problems and data issues.
* Worked with Linux server admin team in administering the server hardware and operating system.
* Responsible for configuring, administering and providing support for UNIX such as Red Hat 6/7, Centos6/7.
* Monitor Linux systems for performance and availability.
* Migrating data from Oracle to Data Lake using Sqoop, Spark and Pentaho (ETL Tool).
* Maintains data files and Monitor system configuration to ensure data integrity on Red Hat Systems.
* Monitor cluster stability, use tools to gather statistics and improve performance.
* Help to plan for future upgrades and improvements to both processes and infrastructure.
* Keep current with latest technologies to help automate tasks and implement tools and processes to manage the environment.
* Pulling data from different data sources by using API’s and do cleansing and keep data on HDFS and then apply some logic through Pentaho (ETL) and pushing into HDFS to access the data from hive and impala.
* Involved in implementing High Availability and automatic failover infrastructure to overcome single point of failure for Name Node utilizing zookeeper services.
* Started one click deployment to required environment.
* Maintained version control setup of configuration files, automount maps, software repos etc. using subversion (SVN)/Git repositories.
* Working on Deployment procedures using middleware like Tomcat creating deploy scripts and setting for the Production Release.
* Performing all necessary day-to-day Subversion/GIT support for different projects.
* Setting up the automation environment for Application team if necessary and helping them through the process of build and release automation.
* Automating the build and release management process including monitoring changes between releases.
* Worked on Tomcat Web server for hosting web apps.
* Automated 100 nodes of EMR cluster by using Ansible.

**Education:**

**Bachelor’s degree in computer science** at JNTU University, India. (May 2010)

**Master’s degree in computer science** in International Technological University, USA (May 2012)