# Swamy Reddy

# AWS DevOps Engineer

# sreddy.cloud9@gmail.com

# +1 978-295-1155

**PROFESSIONAL SUMMARY:**

* A proactive, result oriented IT Professional with around **10+ years** of experience in IT industry with major focus **on Network Troubleshooting, Automating, Building, Deploying, and Releasing** of code includes **Amazon Web Services (AWS), Azure and GCP** in a **DevOps** and **SRE** Culture through **Continuous Integration (CI) & Continuous Deployment/Delivery (CD)** as an iterative process and Automation of Infrastructure as Code.
* Experience in maintaining the application in **AWS**, **Azure** platform for launching the VM's and **Google Cloud Platform(GCP**). Proficient in prioritizing and completing tasks in a timely manner, yet flexible to multitask when necessary.
* Strong Experience in setting up **enterprise** infrastructure on **AWS** platform and In-depth knowledge in designing highly available, fault tolerant, scalable systems like **EC2, S3, EBS, VPC, ELB, AMI, SNS, SQS, RDS, IAM, Lambda, Route 53, Auto scaling, Load Balancing, Cloud Front, Cloud Watch, Cloud Trail, Cloud Formation, OPS Works, NAT Gateways, Subnets, Security Groups** and **NACL's.**
* Experience in designing **AWS** cloud models for Infrastructure-as-a-Service (**IAAS**), Platform-as-a-Service (**PAAS**) and Software-as-a-Service (**SAAS**).
* Proficient level of experience on DevOps essential tools like **Chef, Puppet, Ansible, Docker, Subversion (SVN), GIT, Hudson, Jenkins, Ant, Maven** and **AWS** Developer services like **Code Deploy**, **Code Commit**, Code Build and Code Pipeline.
* Migrated physical servers (**Windows and Linux**) into the**Google Cloud Platform**. This provided better high availability and allowed to reduce the dependency on remote datacenters.
* Experience on Cloud Automation using **AWS** Cloud Formation Templates, **Terraform, Chef** and **Puppet.**
* Implemented **Terraform** modules for deployment of applications across multiple cloud providers.
* Experience in Converting existing **AWS** infrastructure to Server less architecture (**AWS** **Lambda**, **Kinesis**), deploying via **Terraform** and **AWS** Cloud Formation.
* Experience in Installing, setting up & Troubleshooting **Ansible**, created and automated platform environment setup through **Ansible** playbooks in **YAML**
* Managed **Ansible Playbooks** with **Ansible modules**, implemented CD automation using **Ansible**, managing existing servers and automation of build/configuration of new servers.
* Hands on experience in the design, implementation and support of automated Containerized Infrastructure using **Kubernetes**.
* Solid experience in deploying applications to **Kubernetes** using **Helm Charts**, created reproducible builds of the **Kubernetes** applications, managed **Kubernetes** manifest files and also managed releases of Helm Packages
* Experienced with event-driven and scheduled **AWS Lambda** functions to trigger various **AWS** resources and worked on **Lambda** for triggering events with cloud watch using **Lambda** functions.
* Experience in managing the artifacts generated by **MAVEN** in the Nexus repository.
* Working knowledge in the functional usage and deployment of applications in **Web Logic, Web Sphere** and **Apache Tomcat** Server.
* Good experience in converting **build.xml** into **pom.xml** in order to build the applications using **MAVEN**.
* Worked on Setting up and maintaining **observability** tools like **Prometheus, Grafana**, and tracing systems to monitor the health and performance of **Kubernetes** clusters and applications.
* Worked on **Production** support and provided **Level 2** technical support, troubleshooting the issues and performed **root cause analysis** for production errors.
* Worked on **Google cloud platform (GCP)** services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Setup **GCP** Firewall rules to allow or deny traffic to and from the VM's instances based on specified configuration and used GCP cloud CDN (content delivery network) to deliver content from GCP cache locations drastically improving user experience and latency.
* Hands-on experience in installation, configuration, supporting and managing **Hadoop Clusters**.
* Ability to grasp latest technologies and to properly apply new tools to build applications.
* Good Interpersonal Skills, team-working attitude, takes initiatives and very proactive in solving problems and providing best solutions.

**Education:**

* Master of Computer Applications from Osmania University, India.

**Technical Skills:**

|  |  |
| --- | --- |
| Cloud Management | **Amazon Web Services(AWS), Azure & Google Cloud Platform(GCP)** |
| Source control tools | **Subversion, Clear case, GIT, GitHub** and **Perforce.** |
| Build Tools | **Ant, Maven, Gradle, Scala** & **Build Forge** |
| CI Tools/Release | **Jenkins, Travis, Bamboo, Hudson, Terraform, DevOps Toolchain** |
| Containerization/Virtualization | **Docker, Docker Swarm, Packer, VMware, VSphere.** |
| Orchestration Platforms | **Kubernetes** |
| Testing Tools | **Selenium, JUnit, Test NG, SonarQube** |
| Repositories | **Nexus, JFrog Artifactory, ICCR** |
| Web Technologies | **HTML, JavaScript, CSS, XML, Node.js** |
| Deployment tools | **Chef, Puppet, Ansible, Vagrant, Kickstart, OpenShift, Saltstack** |
| Monitoring Tools | **Nagios, Splunk, New Relic, ELK stack** |
| Big Data Technologies | **Hadoop, Hive, Sqoop, HBase, Spark, Flume and Kafka.** |
| Operating Systems | **Windows 98/XP/NT/2000/2003/2008, UNIX, LINUX, CentOS, RHEL, SOLARIS, SUSE, Ubuntu.** |

**Professional Experience:**

**Client: BNY Mellon January-2022 – Till date**

**Role: AWS DevOps Engineer**

**Responsibilities:**

* Designed, configured and managed public/private cloud infrastructures utilizing **Amazon Web Services (AWS)** like **EC2, Elastic Load-balancers, Elastic Container Service (Docker Containers), S3, Elastic Beanstalk, Cloud Front, Elastic File System, RDS, DynamoDB, DMS, VPC, Direct Connect, Route53, Cloud Watch, Cloud Trail, Cloud Formation, IAM, EMR and Elastic Search.**
* Created AWS **IAM** users with **CodePipelineFullAccess, AmazonEC2FullAccess, AmazonS3FullAccess and AWSCodeDeployFullAccess,** generated security credentials and provided those credentials to users to get **AWS**access.
* Customized both **JIRA** and Confluence to integrate into the pre-existing systems with an eye towards making the programs extensions of their systems, and not hindrances to their systems.
* Developed automation framework for Application Deployments to the Cloud environments using **Terraform** and maintained **Docker** as Elastic Container Service (**ECS**).
* Used **Terraform** as **Infrastructure as a code** and Execution plans, Resource Graphs, Change Automation and extensively used **Auto scaling** launch configuration templates for launching amazon **EC2** instances while deploying micro services.
* Worked with **AWS Terraform** in **AWS Virtual Private Cloud** to automatically setup and modify settings by interfacing with control layer and responsible to setup **Elastic search cluster** using **Terraform scripts** to block all the Spam and Possible attacks
* Deployed and configured **JIRA** on hosted instances for **issue tracking**, workflow collaboration and tool-chain automation.
* Implemented **CICD** allowing for deploy to multiple client **Kubernetes/AWS** environments
* Worked on Setting up and maintaining **observability** tools like Prometheus, Grafana, and tracing systems to monitor the health and performance of **Kubernetes** clusters and applications.
* Worked on Developing and maintaining **Kubernetes Operators**, custom controllers that automate the management of complex applications.
* Worked on installation, configuration, maintenance and troubleshooting **of Red hat Linux, Suse Linux, Ubuntu, Fedora, CentOS, Sun Solaris** and **some Windows Servers.**
* Experience on complete software development life cycle (SDLC) with software development models like **Agile, Scrum Model, JIRA, Waterfall model.**
* Continuous integration and automated deployment and management using **Jenkins, Chef, Maven, Ant, Docker,** or comparable tools.
* **Jenkins** - automates the provisioning and configuration for all of the **Jenkins** Continuous Integration Server including plugins, jobs, server configuration, etc. Used various plug-ins to extend the base functionality of **JENKINS** to deploy, integrate tests and display reports.
* Used **MAVEN** as a build tool on **Java projects** for the development of build artifacts on the source code Managed **Maven** project dependencies by creating Parent-child relationships between all projects.
* Expertise in writing **Ansible** **Playbooks**, Creating Inventory, job templates and scheduling jobs using **Ansible Tower**.
* Wrote Ansible Playbooks with **Python SSH** as the Wrapper to Manage Configurations of **AWS** nodes and Tested Playbooks on **AWS** instances using **Python**. Run **Ansible Scripts** to Provide Dev Servers
* Expertise in deploying applications on to Application servers such as **Apache Tomcat**, **Web Sphere** and **Nginx**
* Experience on Cloud Automation using **AWS** Cloud Formation Templates, **Terraform, Chef** and **Puppet.**
* Implemented **Terraform** modules for deployment of applications across multiple cloud providers.
* Experience in Converting existing **AWS** infrastructure to Server less architecture (**AWS** **Lambda**, **Kinesis**), deploying via **Terraform** and **AWS** Cloud Formation.
* **Docker** container deploying micro services, and scaling the deployment using **Kubernetes**.
* Developed **CI/CD** system with Jenkins on Google's **Kubernetes** container environment, utilizing **Kubernetes** and **Jenkins** for the runtime environment for the **CI/CD** system to build and test and deploy.
* Handled **Kubernetes** to deploy scale, load balance, scale and manage docker containers with multiple name spaced versions.
* Exposure to **Mesos and Marathon** environment for application deployments and **Docker** Containers. Installing of **Docker** using **Docker toolbox**, created **Docker images** using a **Docker file**. Also, worked on **Docker container** snapshots, removing images, and managing Docker volumes.
* Experienced with deployment automation of all the microservices to pull image from the private **Docker** Registry and deploy to **Docker swarm** cluster using **Ansible**.
* Extensive experience of working with release and deployment of large scale and Enterprise applications and used **AWS Lambda** as Microservices and API gateways to achieve scalability.
* Ability to write scripts in **Bash/Shell, Perl, Ruby, Python** to automate Cron jobs and system maintenance.
* Deployed and managed web services with **Tomcat** and **JBOSS**. Provided end-user straining for all **Tortoise SVN, JIRA** users to effectively use the tool.
* Worked on functions in **Lambda** that aggregates the data from incoming events, then stored result data in Amazon Dynamo DB. This function also sends for simple monitoring of metrics.

**Environment:** AWS, Terraform, Docker, Kubernetes, Chef, Ansible, Nagios, Splunk, SonarQube, Oracle, MSSQL, MySQL, AWS EC2, IAM, S3, VPC, Cloud Watch, ELB, SNS, GIT, GITHUB, Maven, Jenkins, Python, Perl, Shell, Jboss, Tomcat.

**Client: MetLife September-2018 to December-2021**

**Role: AWS DevOps Engineer**

**Responsibilities:**

* Developed an **AWS** security roadmap which included the **AWS** Services and 3rd party tools to be utilized in the **AWS** Cloud for Security monitoring.
* Utilized multiple **AWS** technologies to provision and deploy HIPAA-compliant infrastructure and server instances like Elastic Cloud Compute **(EC2),** Elastic Load Balancer **(ELB),** Virtual Private Cloud **(VPC),** **S3,** Relational Data Service **(RDS),** Redshift, Ops Works, Identity, and Account Management **(IAM)** policies, Cloud Formation, Cloud Watch, and other AWS tools/technologies.
* Enabled and configured Cloud Trail logs for all **VPC's** in all **AWS** accounts.
* Hands-on experience with Amazon Web Services (**AWS**) and using **AWS Kinesis, SQS**.
* Created and managed an encrypted **S3** Bucket for all Cloud Trail Logs Encrypted bucket.
* Using **AWS** Lambda, running scripts/code snippets in response to events occurring in **AWS** Cloud and maintaining it.
* Managed and worked with various instances of **EC2,** creating **AMI's,** managing **EBS** volumes and configuring security groups.
* Worked on **Production** support and provided **Level 2** technical support, troubleshooting the issues and performed **root cause analysis** for production errors.
* Developed automation framework for Application Deployments to the Cloud environments using **Terraform** and maintained **Docker** as Elastic Container Service (**ECS**).
* Used **Terraform** as **Infrastructure as a code** and Execution plans, Resource Graphs, Change Automation and extensively used **Auto scaling** launch configuration templates for launching amazon **EC2** instances while deploying micro services.
* Worked with **AWS Terraform** in **AWS Virtual Private Cloud** to automatically setup and modify settings by interfacing with control layer and responsible to setup **Elastic search cluster** using **Terraform scripts** to block all the Spam and Possible attacks.
* Experience in full automation and configuration management using tool **Terraform**.
* Understanding on Automation Scripting language **Terraform**.
* Orchestration and migration of CI/CD processes using Cloud Formation and **Terraform**.
* Working on **Docker** on **Linux** installs as well as cloud providers. Creating **Docker Image** On one hand I can spawn a **container** and build it interactively.
* Worked on **Docker** open source project by automating the deployment of applications inside software **containers**.
* Analyze and resolve conflicts related to merging of source code for **GIT**. Worked in **Agile Scrum** Project management Process
* Performed **WebLogic** Server administration tasks such as installation, configuration, monitoring and performance tuning.
* Analyze **Cassandra** database and compare it with other open-source **NoSQL** databases to find which one of them better suites the current requirement.
* **UrbanCode Deploy** is an application release automation solution that combines robust visibility, traceability, and auditing capabilities
* **UrbanCode Deploy** orchestrates and automates the **deployment of applications**, middleware configurations, and **database** changes into **development, test**, and **production environments**.
* Creating a fully Automated Build and Deployment Platform and coordinating code builds promotions and orchestrated deployments using **Jenkins/Hudson**, and **GitHub**.
* Installed and configured **GIT** and Implemented and maintained the branching and build/release strategies utilizing **GIT.**
* Pushing Code from **GIT** to nexus make available for release through automation script using **Jenkins.**
* Experience with **Chef** and Infrastructure as Code concepts, attended Chef Essentials training performed by **Chef.**
* Used **Puppet** and **Puppet** **dashboard** for Configuration Management of hosted Instances within **AWS.**
* Used **Puppet** web console to monitor the states of node servers, resources, and **Puppet** classes.
* Good understanding of the DevOps philosophy and contributed **Puppet** modules to automate our system management.
* Automated builds and deployment with **Jenkins, Maven, Bash scripts, Chef.**
* Involved in editing the existing **ANT/MAVEN** files in case of errors or changes in the project environments.
* Developed Build using **MAVEN** as build tool and used CI tools to move builds from one environment to other environments.

**Environment:** AWS, Jenkins, Java/J2EE, Terraform, ANT, MAVEN, CHEF, Docker, TC Server, Tomcat, Puppet, Shell Scripts, XML, UNIX, Windows 7, Oracle, JIRA.

# Client: Cisco Systems April-2016 to August-2018

# Role: AWS DevOps Engineer

**Responsibilities:**

* Worked as DevOps Engineer, set up and managed Linux and Windows servers, building and supporting web SaaS solutions based on Linux/Unix platform in a cloud (**AWS**) and on-premise, experience on server infrastructure migration, monitoring and securing.
* Extensively worked on building pipelines using **Jenkins** for automating the deployments.
* Worked as DevOps Engineer, set up and managed Linux and Windows servers, building and supporting web SaaS solutions based on Linux/Unix platform in a cloud (**AWS**) and on-premise, experience on server infrastructure migration, monitoring and securing.
* Extensively worked on building pipelines using Jenkins for automating the deployments.
* Experience in providing POC's to provision the **AWS** infrastructure using Ansible playbooks which includes checking the health status, monitoring and gathering facts about the ec2-instances, elastic load balancers, auto scaling groups and other AWS resources.
* Performing unit testing using JUnit and provide source code analysis to detect bugs and code vulnerabilities using SonarQube.
* Used SonarQube to monitor and maintain code coverage.
* Experience in integrating code quality tools such as SonarQube in CI/CD pipelines.
* Improved code quality for internal .NET applications by introducing SonarQube to build processes.
* Onboard numerous applications into **SonarQube** and help maintain the SonarQube installation. Experienced and involved in Access Management and implementation with tools such as Okta ASA, Okta Identity, and CyberArk for applications.
* Hands on experience in **Kubernetes, Docker, AWS**, migrating to new servers and involved in Webserver Upgrade Project.
* Created **AWS S3 buckets**, performed folder management in each bucket, Managed cloud trail logs and objects within each bucket.
* Actively involved in automating the deployment procedure and handing off the environments.
* Experienced in working on Web Config transformations related to different environments.

**Environment:** AWS, Docker, Kubernetes , Terraform, SonarQube , API, NFS, DNS, Jenkins, Maven, GIT, Splunk, Logstash, Kibana, Centos.

**Client: NetApp January-2013 to April-2016**

**Role:** **DevOps Engineer**

**Responsibilities:**

* Experienced in branching, tagging and maintaining the version across the environments using **SCM** tools like **GIT** and **Subversion** (SVN) on **Linux** and Windows platforms.
* Hands-on experience in **Azure Cloud** Services (PaaS & IaaS), Storage, Web Apps, Active Directory, Application Insights, Logic Apps, Data Factory, Service Bus, Traffic Manager, **Azure** Monitoring, OMS, Key Vault, Visual Studio Online (VSO), Cognitive Services (LUIS) and **SQL Azure**. , **Azure Active Directory**, API Management, Scheduling, Auto Scaling, and **PowerShell** Automation.
* Experience with Microsoft Azure, Azure Resource Management templates, Virtual Networks, Storage, Virtual Machines, and Azure Active Directory
* Exposed Virtual machines and cloud services in the VNets to the Internet using Azure External Load Balancer.fc
* Experience of working with **Azure Monitoring**, **Data Factory, Traffic Manager, Service Bus, Key Vault**.
* Automations for Azure resource creation, query and deployment application POC using **AAD** ( azure active directory ) authentication and **ARM** (Azure resource manager) **API**. Added workflow front pages and Typescript using Aurelia javascript framework.
* Hands on experience with build tools like **Maven, Ant,** and **Gradle.**
* Implementing a **Continuous Delivery** framework using **Jenkins, Chef, Maven** in **Linux environment**
* Written wrapper scripts to automate deployment of cookbooks on nodes and running the **chef** client on them in a **Chef-Solo** environment
* Worked Extensively on building and maintaining clusters managed by Kubernetes , Linux, Bash, GIT , Docker, on **GCP** (Google Cloud Platform)
* Worked on **Google cloud platform (GCP)** services like compute engine, cloud load balancing, cloud storage, cloud SQL, stack driver monitoring and cloud deployment manager.
* Managed On-site OS/Applications/Services/Packages using **Chef** as well as **AWS** for **EC2/S3/Route53** & **ELB** with **Chef** Cookbooks.
* Worked in various Devops tools **like Jenkins, Puppet, SVN, GIT,** and **Ansible** Well knowledge in **CI** (Continuous Integration) and **CD** (Continuous Deployment) methodologies with **Jenkins**.
* Developed and deployed **Chef, puppet, Ansible** based on their cookbooks, recipes, manifest and roles.
* Design and Implemented Cloud Orchestration solution using Google Cloud, AWS EC2 & Microsoft Azure, Docker and **Kubernetes**.
* Initially thought of using **Kubernetes** the finally decided to use **Docker** swarm because **Docker swarm** is integrated with **Docker daemon**.
* Experience in using Nexus Repository Managers for **Maven** builds.
* Experience with **Scrum** and **Agile** Environments for regular cadences of work.
* Extensive experience in building & deploying **EAR, WAR, JAR** files on test, stage & production servers.
* Managed Linux and Windows virtual servers on **EC2** using **Chef Server** and Familiar with Cloud, Elastic.
* Used **AWS lambda** to run servers without managing them and to trigger to run code by **S3** and **SNS**.
* Initially thought of using **Kubernetes** the finally decided to use **Docker** swarm because **Docker swarm** is integrated with **Docker daemon**.
* Build Back-end support for Application from ground up using **Python, Shell scripts** & **Perl.**
* Working Experience on **Azure Storage**, **SQL Azure** and also in different **PaaS** Solutions with Web, and worker Roles and **Azure Web Apps**
* Experience working on Service fabric and **Azure** container service. Designed and deployed architecture for **Azure** Service fabric
* Replicated the Jenkins build server to a test **VM** using **Packer**, **Virtual Box,** **Vagrant**, **Chef**, **Perl** brew and **Serverspec.**

**Environment:** AWS, Azure, GCP, Python, Puppet, Ansible, API, Docker, Kubernetes, StorageS3 Java/J2ee, NFS, DNS, Jenkins, Maven, GIT, Splunk, Shell script.EC2, Logstash, Kibana, Centos.