**SAHITHI GUBBALA**

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 **Sr. DevOps Engineer / Cloud Engineer**

**PROFESSIONAL SUMMARY**:

* IT professional with over **7+** years of work experience with main focus on providing **infrastructure automation** services within private and public cloud and also including experience in services based on continuous delivery and build with cloud services like **AWS** and **Azure** development in Windows and Linux systems.
* Expertise in using combination of Automation/Tools and processes to achieve Continuous Integration/Continuous Delivery for various applications by integrating tools like Jenkins, Jenkins X, Git, Docker, Kubernetes, Helm, Ansible/Chef in On-prem & Cloud Environments.
* Expertise in managing Cloud Infrastructure Services and **DevOps** Automation, Build and Release Management, and Software Configuration Management.
* Expertise in **RedHat** Linux System administration, **OS** upgrades, security patching, troubleshooting, and ensuring maximum performance and availability.
* Setting up and maintaining **GitHub** infrastructure and supporting a continuous delivery model automating software build and package migration processes.
* Expertise in infrastructure automation through **Terraform, Cloud Formation, Ansible, Python**, and **Bash Scripts**. Built staging and production environments using these templates.
* Expertise in migrating On-premises production infrastructure into Amazon Web Services utilizing Terraform, AWS Cloud Formation, Code Deploy, EBS and Ops Works.
* Expertise in Automation, Configuring, Deploying utilizing almost the entire AWS stack (**EC2, ECS, S3, EBS, Kms, VPC, AMI, SNS, RDS, IAM,KMS, Route 53, Snow flake, Security Hub, Auto scaling, System manager, CloudFront**, **CloudWatch, CloudTrail, CloudFormation**, Ops Work, Security Groups) focusing on fault tolerance, high availability, and auto-scaling.
* Expertise with IPsec, **VPN**, **Load Balancing, Routing Protocols,** **SSH, SSL,** Network Monitoring / Troubleshooting tools.
* Expertise in scheduling **AWS** Lambda functions to trigger various **AWS** resources, triggering events with cloud watch using Lambda functions and worked on AWS Migration services like Snowball, Direct Connect, kinesis.
* Expertise in writing Infrastructure as a code (**IAC**) in **Terraform**, Azure resource management, **AWS** Cloud Formation. Created reusable Terraform modules in both **Azure** and **AWS** Cloud Environments.
* Hands on experience in Azure Development, worked on **Azure web application, App services, Azure storage, Azure SQL Database, Virtual machines, Virtual Network**, **Azure AD, Azure search** and notification hub**, Azure Kubernetes Service, Azure load balancer, Helm and Azure monito**r.
* Hands on experience in Azure Development, worked on **Azure** web application**, App services, Azure storage, Azure SQL Database, Virtual machines, Virtual Network**, **Azure AD, Azure search** and notification hub**, Azure Kubernetes Service, Azure load balancer, Helm and Azure monito**r.
* Experience creating cloud big data solutions such as HDInsight, **Azure** Data Warehouse**,** Azure Data Lake, Azure Data factory and Azure Analytics Services. Setting up Virtual networks for Site-to-Site, Point-to-Site and Express Route. Worked on Tickets assigned related to Discovery & **CMDB.**
* Develop and build **Ansible** Playbooks for Installation and Modules with **VSCode**and deploying playbooks using **GIT** version Control tool.
* Expertise in Configuring **AWS Kubernetes (EKS) KOPS** with Terraform scripts to deploy microservices with CI/CD system and to scale up operations of pods, maintain services, load balancing, network policies, group Docker containers across different platform and managed entire package with Helm charts.
* Used scripting languages like **Python, PowerShell, Ruby, Perl, Bash** and configuration management tools **Chef, Ant, Ansible, Puppet, Bamboo, Nagios, Atlassian** and **CF** Engine.
* Provided consistent environment using Kubernetes for deployment scaling and load balancing to the application from development through production, easing the code development and deployment pipeline by implementing **Docker** Containerization.
* Building/Maintaining Docker container clusters managed by Kubernetes also Used Kubernetes to orchestrate the deployment, scaling and management of Docker Containers.
* Expert in deploying the code trough web application servers like Web Sphere/Web Logic/Apache Tomcat/ JBOSS.
* Expertise in creating **Puppet** modules to automate deployment, configuration, and lifecycle management of key clusters.

**Skill set:** AWS, Azure, Jenkins, Chef, Puppet, Ruby, GIT, Subversion, Kubernetes, Terraform, Ansible, Docker, Maven, ANT, Unix, Linux, Ubuntu, Red hat, Solaris, Centos, Fedora, Apache Tomcat 6.x/7.x, JBoss 7.x, Nginx, WebLogic 11g/12/c, WebSphere 7/8, Sun ONE 6.x, MS IIS server 6.0/7.0, IBM-HTTP Server.

**Education background:**

Master’s in Computer science

**Work Experience:**

 **American Electric Power, Columbus, OH**

 **Sr DevOps Engineer /AWS Cloud Engineer**

 **Nov 2019 – Present**

**Responsibilities:**

* As part of DevOps team, my role includes release management, deployments, CI / CD, Incident management, version management.
* Automated Build and Deployment process-setup Continuous Integration and Continuous Deployment of applications onto different environments like Dev, QA and Production.
* Involved with planning, designing, and transforming environments from on-premises to cloud-based Work as Cloud Administrator on Microsoft Azure, involved in configuring virtual machines, storage accounts, resource groups.
* Created re-usable CloudFormation templates to embed into other cloud formation templates as nestedstacks.
* Set up CI/CD pipelines for Microservices and integrated tools such as Maven, Bitbucket, SonarQube, Nexus, Docker, Slack for providing immediate feedback to DEV teams after code check-in.
* Deployed Docker Engines in Virtualized Platforms for containerization of multiple applications.
* Worked with cluster management and orchestration features embedded in Docker Engine and worked on creation of custom Docker container images, tagging, pushing the images and Dockers consoles for managing the application of life cycle.
* Used Kubernetes for automated deployments, scaling and management of containerized applications across clusters of hosts.
* Installed Kubernetes clusters in VMS, started Kube Master and Kubelets and added Container Network Interface.
* Worked with Terraform key features such as Infrastructure as a code, Execution plans, Resource Graphs and Change Automation. Experience in Converting existing AWS Infrastructure to Server less architecture (AWS Lambda) deploying via Terraform and AWS Cloud Formation templates.
* Used Docker for container snapshots, attaching to a running container, removing images, managing director structures and managing containers in Docker registry.
* Created functions and assigned roles in AWS Lambda to run python scripts, and AWS Lambda using java to perform event driven processing.
* Wrote Lambda functions in python for AWS Lambda and invoked power shell scripts for data transformation and analytics on large data sets in EMR clusters and AWS Kinesis data Streams.
* Implemented Azure Code Pipeline and Created Cloud formation JSON templates in Terraform for infrastructure as code.
* Configured and deployed Azure Automation Scripts for a multitude of applications utilizing the Azure stack for Compute, Web and Mobile, Blobs, Resource Groups, Azure Data Lake, HDInsight Clusters, Azure Data Factory, Azure SQL, Cloud Services, and ARM Services and utilities focusing on Automation.
* Experience migrating infrastructure and application from on premise to Azure and from Cloud to Cloud such as AWS to Microsoft Azure.
* Wrote Lambda functions in python for AWS Lambda and invoked power shell scripts for data transformation and analytics on large data sets in EMR clusters and AWS Kinesis data Streams.
* Designed and configured Azure Virtual Networks (VNets), subnets, Azure network settings, DHCP address blocks, DNS settings, security policies and routing.
* Deployed Azure IaaS virtual machines (VMs) and Cloud services (PaaS role instances) into secure VNets and subnets.
* Developed Ansible Playbooks and Modules with VScode and deploying playbooks using GIT version control.
* Used Ansible to manage and configure nodes, Managed Ansible playbooks with Ansible roles and file module in unstable playbook to copy and remove files on remote systems.
* Implemented a production ready, load balanced, highly available, fault tolerant, auto scaling, Kubernetes AZURE infrastructure and micro service container orchestration.
* Performed the daily system administration tasks like managing system resources and end users support operations and security.
* Configuration of Jenkins along with Maven and Python Scripts for Automated build and deployment Process.
* Worked on Network monitoring tools like Nagios, Splunk. Maintenance of Splunk Environment with multiple indexes and configuring the index settings.

Environment: GIT, Jenkins, Amazon Web Services (AWS), shell, Ansible, Dockers, containerization, Kubernetes, AZURE, Orchestration.

 **Thomson Reuters, Eagan, MN**

 **DevOps Automation Engineer / Cloud Engineer**

 **Feb 2018-Nov 2019**

**Responsibilities:**

* Worked on Automating, Configuring and Deploying Instances on Azure environments and in Data centers and migrating on premise to windows Azure using Azure Site Recovery and Azure backups.
* Set up private networks and sub-networks using virtual private cloud (VPC) and created security groups to associate with networks.
* Resolved the issue of parallel builds and reduced the infrastructure cost for build agents by using the Docker containers as build slaves for Jenkins
* Performed building advanced CI/CD workflows utilizing Kubernetes/Serverless Framework, including designing and building infrastructure, build/deployment, and QA Testing of workflows
* Created Private networks and sub-networks and brought instances under them based on requirement.
* Worked with Terraform key features such as Infrastructure as code, Execution plans, Resource Graphs, Change Automation and extensively used Auto scaling launch and configuration templates for launching amazon EC2 instances while deploying Microservices.
* Worked on security services like Azure Key Vault and Monitoring tool Azure Monitor.
* Worked on creation and design of AWS Route 53 and CloudFront to route traffic between different edge locations for static web pages in S3 and thus saving overall 7% application deployment workflow process
* Extensively used Load Balancing mechanism with Auto Scaling feature to scale the capacity of EC2 Instances across multiple availability zones and worked on IAM to grant fine-grained access to AWS resources to users.
* Created and maintained highly scalable and fault tolerant multi-tier AWS and Azure environments spanning across multiple availability zones using Terraform and CloudFormation and wrote many terraform scripts from scratch for building Dev, Staging, Prod and DR environments.
* Worked on Automating, Configuring and Deploying Instances on Azure environments and in Data centers and migrating on premise to windows Azure using Azure Site Recovery and Azure backups.
* Automate provisioning of cloud infrastructure using CloudFormation, terraform and application configuration and deployment using Terraform and Ansible.
* Performed daily system administration tasks like managing system resources and end users support operations and security.
* Worked on Jenkins and Configuration management tools (Chef/Ansible/Puppet) to push all Microservices builds to the Docker registry and then deployed. Used Nagios monitoring tool to report detailed resource usage information.
* Resolved the issue of parallel builds and reduced the infrastructure cost for build agents by using the Docker containers as build slaves for Jenkins.
* Configured Docker containers by creating Docker compose files and pushed Docker images onto EC2 instances from Docker-Registry to deploy the applications using Kubernetes. Worked extensively on Docker Images, attaching to running container, removing images, managing directory structures and managing containers.
* Install Kafka on AWS cluster and configure producer and consumer coding part in java.
* Loaded data from various data sources into AWS S3 using Kafka
* Worked with automation tools which are pre-installed in the azure DevOps portal to build the packages. The automation tools like NPM and MAVEN with build.xml, SonarQube and pom.xml scripting languages depending on the packages like java
* Used Kubernetes to orchestrate the deployment, scaling and management of Docker Containers

Environment: AZURE, AWS (EC2, S3 Glacier, VPC, IAM, EBS, RDS, Autoscaling, CloudWatch, CloudFormation, ELB, SNS, SQS, Lambda, Route53, CloudFront, DynamoDB), Azure, OpenStack, Kubernetes, Docker, Ansible, GIT, Bitbucket, Splunk, PowerShell, Terraform, Python, Ruby.

 **UBC-BLUEBELL, PA**

 **DevOps / Cloud Engineer**

 **Nov 2016 – Feb 2018**

**Responsibilities:**

* Automated various infrastructure activities like Continuous Deployment, Application Server setup, Stack monitoring using Ansible playbooks and has Integrated Ansible with Run deck and Jenkins.
* Integrated services like GitHub, AWS Code Pipeline, Jenkins and AWS Elastic Beanstalk to create a deployment pipeline.
* Worked on JIRA for Agile software development process.
* Worked on Docker hub, creating Docker images and handling multiple images primarily for middleware installations and domain configurations. Developed and configure Docker images for our private Docker repository.
* Worked towards continuous integration and continuous delivery using Jenkins and Ansible for docker image building and deployment.
* Wrote Ansible Playbooks for configuring and managing multi-node configuration management over SSH and WinRM.
* Managed local deployments in Kubernetes, creating local cluster and deploying application containers.
* Working on Multiple AWS instances, set the security groups, Elastic Load Balancer, and AMIs, Auto scaling to design cost-effective, fault tolerant and highly available systems.
* Used SQL, Python, AWS and willingness to learn new enterprise specific tools for Data Management and DevOps Code Delivery.
* Integrated Jenkins with GitHub private repositories builds Automation tools (Maven and Ant), and Artifact repository for pushing successful build code.
* Worked in Data Analysis and Data Management activities with data quality, Data organization, metadata, and data profiling.

Environment: CloudFormation, Confluence, Agile, RHEL, Kubernetes, Open stack, Red Hat, Chef, Docker, JIRA, VMware, Maven, EC2, Git, Ansible, shell/Perl, API Gateway, Amazon VPC, Terraform, Linux, CI/CD.

 **Myriad Genetics, UTAH**

 **DevOps / Cloud Engineer**

 **Sep 2015 - Nov 2016**

**Responsibilities:**

* Actively involved in a program geared towards migrating existing mission and business applications into a cloud-based environment. Activities required to re-host an application into the cloud may include architecture modifications, database and/or application server re-hosting.
* Used Version Control tool, SVN to create branches and implement parallel development process. Implemented a GIT mirror for SVN repository, which enables users to use both GIT and SVN.
* Configured AWS Identity and Access Management (IAM) Groups and Users for improved login authentication. Created AWS RDS Aurora DB cluster and connected to the database through an Amazon RDS Aurora DB Instance using the Amazon RDS Console.
* Developed and deployed enterprise scale application in the public using Amazon web services tools.
* Used CloudWatch for monitoring AWS cloud resources and the applications that deployed on AWS by creating new alarm, enable notification service.
* Used Terraform in AWS Virtual Private to automatically setup and modify settings by interfacing with control layer.
* Implemented a production ready, load balanced, highly available, fault tolerant, auto scaling Kubernetes AWS infrastructure and microservice container orchestration.
* Used Docker file to automate Docker image creation using Jenkins and Docker
* Experience with implementing and automating, security controls using DevOps methods.
* Created Chef Cookbooks and wrote recipes in Ruby Script to install and configured Infrastructure across environments and automated the process using Python Script.
* Experience in working with Selenium IDE and Selenium Web Driver using testing.

Environment:  Chef, Terraform, AWS VPC, Cloud watch, SVN, GIT, IAM, RDS, Maven, Jenkins, Python script, Ruby script.

 **EBIZ SOLUTIONS**

 **DevOps Engineer**

 **Aug 2013 - July 2015**

**Responsibilities:**

* Utilized Ansible, Puppet, Git to install and configure Linux environments with successful production deployment.
* Installing and configuring of Chef server, Chef-solo along with creating Chef Cookbooks and implemented latest releases of Chef- Solo, Compliance, Habitat and written Chef Recipes to install and configure Nagios for monitoring Infrastructure.
* Migrated Puppet scripts to Ansible playbooks and configured Ansible playbooks to use hashicorp vault.
* Design, develop and implement an automated Linux (Centos, Amazon) infrastructure using Collective and AWS and move existing applications off windows seamlessly to it while aggressively growing.
* Extensively used Load Balancing mechanism with Auto Scaling feature to scale the capacity of EC2 Instances across multiple availability zones and worked on IAM to grant fine-grained access to AWS resources to users.
* Included security groups, network ACLs, Internet Gateways, and Elastic IP'sto ensure a safe area for organization in AWS public cloud
* Integrated Puppet with Apache in the Linux AWS cloud environment using Puppet automation, developed load tests, monitored suites in Python, and integrated puppet modules into Jenkins jobs for CI/CD framework.
* Hands on experience in configuring Jenkins master and slave nodes and manage Jenkins builds for continuous integration and delivery.
* Real time server administration, monitoring, backup and recovery.
* Used Nagios as a monitoring tool to identify and resolve infrastructure problems before they affect critical processes and worked on Nagios Event handlers in case of an automatic restart of failed applications and services.
* Experience on Jenkins, Hudson, Bamboo, and Docker for continuous integration and end to end automation for all build and deployments including setting up pipeline jobs and upstream/downstream job configurations in Jenkins.
* Worked closely with the Database Admins for designing, installing and configuring, restoration and performance tuning of the database.

Environment:  Jenkins, Hudson, Bamboo, Docker, Nagios, Puppet, Ansible, AWS Cloud, IAM, EC2, Centos, Linux.