Gayathri Devi Chukkapalli – Sr. DevOps Engineer

Summary:

· 9+ **Years** of IT-related experience planning, designing, implementing, and maintaining system applications in **Cloud, DevOps, Configuration Management**, AWS, PCF, Google Cloud, and Azure Cloud in Linux and Windows environments, configuration management using **Chef, Puppet, Ansible**, continuous integration (CI) and continuous delivery (CD) using **Jenkins**, containerization using **Docker, Kubernetes, OpenShift, GKE**, virtualization in **VMware** and storage management in **NetApp** and **EMC** systems.

· Extensively worked on Hudson, Jenkins TeamCity, and Bamboo for continuous integration and for End-to-end automation deployments.

· Designed and implemented **CI/CD** DevOps delivery system for the Linux teams, with an innovative test framework that allowed for a significant reduction of capital expense requirements through eq uipment allocation and reuse.

· Built and configured multiple virtual data centers in **AWS/GCP/Azure** cloud to support enterprise data warehouse hosting including **Virtual Private Cloud (VPC), Public and Private Subnets, Security Groups, Route Tables, and Load Balancers**.

· Experienced in maintenance and configuration of user accounts for **dev, QA,** and **production** servers and created roles for **EC2, RDS, S3, CloudWatch, and EBS** resources to communicate with each other using **IAM**.

· Involved in architecting, building, and maintaining a highly available secure multi-zone AWS cloud infrastructure utilizing **Chef** with **AWS CloudFormation** and **Jenkins** for continuous integration.

· Expertise in Architecting and Implementing Azure Service Offering, such as Azure cloud services, **Azure storage**, IIS, **Azure Active Directory (AD)**, **Azure Resource Manager (ARM)**, Azure, **Blob Storage**, Azure VMs, SQL Database, and **Azure Monitor**.

· Hands-on experience in Backup and restoring Azure services and in designing and configuring **Azure Virtual Networks (VNets)**, **subnets**, Azure network settings, DHCP address blocks, DNS settings, security policies, and routing.

· Expertise in Azure Scalability and Azure Availability - Build VM availability sets using the Azure portal to provide resiliency for IaaS-based solutions and Virtual Machine Scale Sets (VMSS) using **Azure Resource Manager (ARM)** to manage network traffic.

· Experienced in deploying and configuring **Chef Server** including bootstrapping of **Chef client nodes** for provisioning and creating **roles, recipes, cookbooks,** and **data bags** for server configuration, deployments, and app stack build-outs.

· Great knowledge of **Puppet** including experience in building and developing Puppet modules, ideally **Hiera** to automate application installation and configuration management.

· Worked on designing, deploying, and configuring **Ansible** server, and agent nodes in multiple environments along with deploying **Ansible dashboard** for defining the **ENCs** (External Node Classifiers)/local and **Ansible valut** for storing the information about the resources, and catalogs.

· Handled several Docker components like **Docker Engine, Hub, Machine, Compose, Registry, and Swarm** and experienced with Docker container service, dockerized applications, and microservices by creating Docker images from **Dockerfile** and running them to create the Docker containers and Docker consoles for managing the application life cycle.

· Worked on **RedHat OpenShift** Container Platform for **Docker** and **Kubernetes**, used Kubernetes to manage containerized applications using its **nodes, ConfigMaps, selector, services,** and deployed application containers as **Pods**.

· Created reproducible builds of the **Kubernetes** applications and managed Kubernetes manifest files, Kubernetes charts using **Helm,** and releases of Helm packages.
· Automated various infrastructure activities like Continuous Deployment, Application Server setup, Stack monitoring using **Ansible playbooks,** and integrating **Ansible** with **Rundeck** and **Jenkins**.

Technical Skills:

Azure Cloud Platform	VMs, VNET, Azure Backup, Azure storage, Azure Blob storage, Azure M
Amazon Web Services:	EC2, EBS, S3, RDS, VPC, SQS, SNS, SES, Cloudfront, DynamoDB, Elastic AutoScaling, IAM, Glacier, Cloud Formation, OpsWorks, Import/Export,
Google Cloud Platform:	Compute Engine, Cloud Storage, Kubernetes Engine, Cloud IAM, Clou Deployment Manager, StackDriver, KMS
Cloud Security:	Hashicorp Vault, Consul, Aquasec, CoreOS Clair, Darktrace, Twistlock, T PAM, IAM
DevOps Tools:	Jenkins, Terraform, Puppet, Chef, Ansible, Docker, Openshift, Kubernet Grafana, Cucumber, Bamboo, ANT, Maven, Griddle, SVN, Kubectl, Ngir
Scripting Languages:	Python, Shell, Ruby, Java, C, C++, Maven, SOAP, Servlets, SQL, Apache
Operating systems:	RHEL, CentOS, Solaris, HP-UX, Unix, VMware ESXi, Windows NT/XP
Web Servers:	Apache, Apache Axis, Tomcat, Web Logic Server, JBOSS, IBM WebSphe
Protocols:	CIFS, NFS, FC, FCoE, iSCSI, LAN, WAN, AD, DNS, LDAP, SAML, NIS

Professional Experience:
Client: Blue Cross & Blue Shield of Minnesota Feb 2022 – Till Date
Role: Sr. DevOps Cloud Engineer
Responsibilities:
· Used Terraform to provision AWS and Azure infrastructure.
· Implementing various Azure using Azure Portal, PowerShell on Azure Resource Manager deployment models. Worked with Terraform Templates to automate the Azure Iaas virtual machines using terraform modules and deployed virtual machine scale sets in production environment.
· Worked with AWS identity access management (IAM) to create roles, users, groups and attached user policies to group to provide secure logins.
· Worked with Terraform Templates to automate the Azure Iaas virtual machines using terraform modules and deployed virtual machine scale sets in production environment.
· Experienced in creating shwll for canary and full deployment through Harness.
· Managed Azure Infrastructure Azure Web Roles, Worker Roles, VM Role, Azure SQL, Azure Storage, Azure AD Licenses, Virtual Machine Backup and Recover from a Recovery Services Vault using Azure PowerShell and Azure Portal.
· Championed in cloud provisioning tools such as Terraform and CloudFormation

· Managed Docker orchestration and Docker containerization using Kubernetes.

· Written Templates for Azure Infrastructure as code using Terraform to build staging and production environments.
· Used Micro service architecture with Spring Boot based service interacting through combination of REST.
· Integrated Azure Log Analytics with Azure VMs for monitoring the log files, store them and track metrics and used Terraform as a tool.
· Built event-driven Java microservices using Spring Boot and Apache Kafka to process real-time health

data feeds with failover resilience.

· Used Lombok and MapStruct to reduce boilerplate code and increase productivity in enterprise Java development.

· Configured Flyway for automated Java-based database schema migrations across CI/CD pipelines.

· Integrated Airflow with Databricks to automate machine learning workflows, data processing, and reporting.

· Built reusable Python libraries for common Databricks administration tasks, such as managing cluster configurations, logging, and alerting.

· Conducted detailed analysis of CloudWatch logs to troubleshoot complex issues in Databricks environments, leading to quicker problem resolution and improved uptime.

· Configured Kafka clusters for high availability and fault tolerance, ensuring 99.99% system uptime.

· Integrated Databricks with MLflow for model versioning, tracking, and experimentation to improve model accuracy and repeatability.

· Utilized Databricks to transform and prepare large datasets before ingestion into data warehouses for analytics.

· Automated the deployment of Datadog agents across all Databricks clusters using CI/CD pipelines, ensuring consistent monitoring coverage.

· Trained team members on using CloudWatch effectively for Databricks monitoring and incident response.

· Integrated AWS CloudFormation with Lambda functions to perform automated provisioning of resources based on dynamic business requirements.

· Implemented asynchronous messaging in Java services using RabbitMQ and Spring AMQP, improving throughput for batch jobs.

· Developed internal REST APIs in Java for secure, token-based authentication and role-based access control using Spring Security and OAuth2.

· Developed customer facing wed application using ASP.NET 4.0 C# and convert to XML data file.

· Involved in conversion of classic ASP web application to latest ASP.NET MVC5 and Angular JS

· Used Microsoft Entity Framework Code First approach for the Data Access Layer for the ASP .NET MVC5 application

· Used C#.NET as language to develop code behind business logic.

· Gathered Client requirements and converted them into Technical Specifications and developed Wed forms using C#.NET.

· Created and wrote Shell Scripts, Ruby, Python, and PowerShell for automated tasks.

· Experience with installation and configuration of the Dynatrace monitoring tool. And created email alerts and threshold values using Dynatrace for our environments.

· Experience in creating shell scripts for canary and full deployment through harness

· Implemented Docker to provision slaves dynamically as needed. Have to create and Maintain Docker files in the source Cose Repository build images and run containers for applications and testing purposes.

· Responsible for creating and maintaining architecture for Restful API using Spring Boot

· Used Spring Boot Actuator to monitor and manage the application in a production environment.

· Used Kubernetes to orchestrate the deployment, scaling and management of Docker Containers.

· Good experience in setting up the CI/CD pipelines using Jenkins, Maven, Nexus, Gitlab, Terraform and AWS and Azure.

· Implementing CI/CD infrastructure leveraging Jenkins Pipelines, Gitlab Repositories, uDeploy, PCF, HP Fortify, Nexus and Sonarqube.

· Designed and implemented multi-threaded Java batch processing services to handle high-volume health records and claims data using Spring Batch.

· Built custom Spring Boot starters to standardize internal microservice development patterns across engineering teams.

· Integrated Java-based microservices with ELK stack for structured log streaming and correlation of logs with health check alerts.

· Configured AWS IAM and Security Group in Public and Private Subnets in VPC.
· Integral part of major agile transformation program, assisting supported applications to implement agile methodologies, providing supporting Automation for stages Build, Code Analysis, Automated Testing, Code Coverage, Artifact Dependency management & Deployment automation.

Client: CITI Bank – Irving, TX. Jan 2020 – Jan 2022

Role: Sr. DevOps Cloud Engineer

Responsibilities:

· Used Terraform to provision AWS and Azure infrastructure.
· Managed Route53 hosted zones, configuring aliases for Elastic Load Balancer (ELB) applications, and was responsible for maintaining ACLs, Security Groups, and firewall configurations.
· Worked with AWS identity access management (IAM) to create roles, users, and groups and attached user policies to groups to provide secure logins.
· Worked with Terraform Templates to automate the Azure Iaas virtual machines using Terraform modules and deployed virtual machine scale sets in a production environment.

· Managed Azure Infrastructure Azure Web Roles, Worker Roles, VM Roles, Azure SQL, Azure Storage, Azure AD Licenses, Virtual Machine Backup, and Recovery from a Recovery Services Vault using Azure PowerShell and Azure Portal.

· Refactored monolithic Java EE applications into Spring Boot microservices, enabling faster deployments and service scalability.

· Integrated Java services with enterprise monitoring platforms like AppDynamics and Dynatrace using custom SDKs for performance baselining.

· Championed in cloud provisioning tools such as Terraform and CloudFormation

· Managed Docker orchestration and Docker containerization using Kubernetes.

· Created reproducible builds of the Kubernetes applications and managed Kubernetes manifest files, Kubernetes charts using Helm, and releases of Helm packages.
· Written Templates for Azure Infrastructure as code using Terraform to build staging and production environments.
· Used Microservice architecture with Spring Boot-based service interacting through a combination of REST.
· Integrated Azure Log Analytics with Azure VMs for monitoring the log files, storing them and tracking metrics and used Terraform as a tool.
· Responsible for creating and maintaining architecture for Restful API using Spring Boot
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Used Spring Boot Actuator to monitor and manage the application in a production environment.

· Used Kubernetes to orchestrate the deployment, scaling and management of Docker Containers.

· Good experience in setting up the CI/CD pipelines using Jenkins, Maven, Nexus, Gitlab, Terraform and AWS and Azure.
· Implementing CI/CD infrastructure leveraging Jenkins Pipelines, Gitlab Repositories, uDeploy, PCF, HP Fortify, Nexus and Sonarqube.
· Configured AWS IAM and Security Group in Public and Private Subnets in VPC.

· Building/Maintaining Docker container clusters managed by Kubernetes Linux, Bash, GIT, Docker, on GCP

· Groups, that are utilized for different environments like dev, testing, staging/prod.

- Architected and successfully implemented shared libraries in Jenkins for CI/CD
- Integral part of major agile transformation program, assisting supported applications to implement agile methodologies, providing supporting Automation for stages Build, Code Analysis, Automated Testing, Code Coverage, Artifact Dependency management & Deployment automation.

- Designed custom Java utilities for log parsing and transformation, integrating outputs with Splunk dashboards for real-time diagnostics.

- Implemented Apache Camel routes in Java to orchestrate internal data processing and file transfers across secure environments.

- Proficient in python, shell scripting, SQL, build utilities like open make ANT and Cruis control.
- Involved in design, implementation and modifying the python code.
- Improved speed, efficiency and scalability of the CI environment, automating wherever possible using Python.
- Automated setting up sever infra for the Devops services using Ansible, shell and python scipts
- Migration of on premises micro services applications to Pivotal Cloud Foundry.
- Expanded Knowledge in numerous Tools & Scripting Languages such as Jenkins, PCF, Gitlab, Nexus, uDeploy and Groovy scripting and WebLogic to name a few.

Client: Verizon --Irving, TX. March 2019 – Dec 2019
Role: Sr. DevOps Cloud Engineer

Responsibilities:
- Designed and deployed GCP Cloud Solutions using Google services like Compute Engine, Cloud Storage Buckets, Persistent Disks, Cloud Load Balancer, Auto Scaling groups, Cloud Deployment Manager, Cloud IAM and Cloud DNS.
- Designed and implemented AquaSec container security platform in GCP for static image scanning as the images are build out of CI/CD pipeline and runtime container protection.
- Designed and implemented Hashicorp Vault in GCP for centralized secrets management across all the applications/databases in the enterprise.

- Developed microservice on boarding tools leveraging Python and Jenkins allowing for easy creation and maintenance of build jobs and Kubernetes deploy and services.

- Used Java and Netty framework to build high-performance, non-blocking APIs for internal service discovery tools.
- Developed Java SDK wrappers for REST and gRPC interfaces to standardize client-side integration across microservices.
- Automated generation of OpenAPI/Swagger docs directly from annotated Java Spring Boot services, improving cross-team collaboration.
- Designed custom Kubernetes init-containers in Java for bootstrapping app configurations and validating runtime secrets.
- Automated deployment from Gitlab-ci to Openshift
- Experience in building Docker images using Gitlab-ci build automation runner.

- Setting Gitlab repository and runner for build automation

- Creation of gitlab-ci.yml file for kicking build process in stage that run in docker container

- Developed build workflows using Gradle, Gitlab-CI, Docker and Openshift.

- Experience on Deployment Automation & Containerization (Docker, Kubernetes).

- Responsible for implementing monitoring solutions in Ansible, Terraform, Docker, and Jenkins.

· Automate Datadog Dashboards with the stack through Terraform Scripts.

· Created Ansible with multiple modules as per component like Kafka, Zookeepers, MySQL, Logstash, HTTP collectors & Schema registry to configure EC2 instances to create/update Kafka cluster.
· Developed in-house spring boot web applications using MAVEN and provided guidance for the application/database teams to integrate with Hashicorp Vault for storing and retrieving secrets.
· Developed and maintained a repository of microservices through Openshift pods and support integration of Openshift and Cloudforms.
· Developed and Deployed multiple applications that require AWS Stack including DynamoDB, IAM and focusing on high availability and auto-scaling of that application.
· Responsible for building AWS infrastructure VPC, EC2, S3, IAM, EBS, Auto scaling and RDS in cloud formation using JSON templates.

· Write terraform scripts from scratch for building Dev, Staging, Prod and DR environments.

· Responsible for build and deployment automation using AWS, Docker, Kubernetes containers and Chef.
· Worked on the IDP development environment setup using Spring Tool Suite using Docker and Kubernetes technologies for creating the Docker containers and deployed into Kubernetes clusters.
· Worked on the setup of Jenkins master/slave to distribute builds on salve nodes and used several Jenkins plugins like Artifactory Plug-in, ANT, Open Make, Maven Plug-in, GIT Plug-in and Hashicorp Vault Plug-in etc.
· Automated the IAM secrets policy management for Hashicorp Vault by integrating it with Jenkins, deployment of PostgreSQL databases, load balancers for AquaSec container security tool inside GCP using CloudSDK and Python.

Client: Care Source – Dayton, OH Sept 2016 – July 2018
Role: DevOps Cloud Engineer
Responsibilities:
· Primary advocate for DevOps initiatives and implementation.
· Define and drive end-to-end agile DevOps based software development life cycle with automation in mind with right tools and techniques.
· Set up and working on Build and Release, Continuous Integration tools and frameworks such as Visual Studio, MS Build and TFS.
· Defining branching strategies and creating the release and hotfix branches.
· Merging of code from Dev branch to Integration, Release branches and deploying the builds into Team forge.
· Preparation of DevOps roadmap and participating in Program Increment planning events
· Worked with AWS identity access management (IAM) to create roles, users, groups and attached user policies to group to provide secure logins.
· Automate provisioning and repetitive tasks using Terraform and Python , Docker container, Service Orchestration.
· Implemented AWS Code Pipeline and Created Cloud formation JSON templates in Terraform for infrastructure as code.
· Implementing a Continuous Delivery framework using Hudson, Chef, and Maven
· Worked with Terraform for routine AWS tasks such as encrypting EBS volumes and backing AMIs.
· Worked on building and configuration management, SCM strategies like branching, merging, and provided training to develop teams in GIT, SVN and Branching strategies.
· Automated Weekly releases with ANT/Maven scripting for Compiling Java Code, Debugging and Placing Builds into Maven Repository.

· Kubernetes is being used to orchestrate the deployment, scaling and management of Docker Containers.

· Involved in supporting cloud instances running Linux and Windows on AWS, experience with Elastic IP,

Security Groups and Virtual Private Cloud in AWS.

· Extensive experience on configuring Amazon EC2, Amazon S3, Amazon Elastic Load Balancing, IAM and Security Groups in Public and Private Subnets in VPC appand other services in the AWS.

· Implemented and maintained the monitoring and alerting of production and corporate servers/storage using AWS Cloud watch.

· Administered Source Code Management (repository, branching strategies) GIT, SVN tools.

· Managing Amazon Web Services (AWS) infrastructure with automation and configuration management tool Chef.

· Managed Amazon Web Services like EC2, S3 bucket, RDS, EBS, ELB, Auto-Scaling, AMI, IAM through AWS Console and API Integration with Puppet Code.

· Involved in SVN to GIT code migration.

Client: Wide Business Solutions– India May 2014 – Aug 2016
Role: DevOps Cloud Engineer
Responsibilities:
· Configured and managed various AWS services such as EC2, ELB, VPC, DynamoDB, RDS, S3, CloudFormation, CloudWatch, Route53, CodePipeline, Elastic Beanstalk and SQS.
· Responsible for designing, implementing, and supporting fully automated Continuous Integration and Continuous Delivery processes using Puppet.
· Created and configured several S3 buckets for static website hosting and enabled versioning to protect against accidental data deletion and life cycle policies to move data to cost-efficient backup services like AWS Glacier.
· Migrated media (images and videos) to S3 and used CloudFront to distribute content with low latency and at high data transfer rates. Also migrated Microsoft SQL Server databases to AWS RDS and setup Multi-AZ deployments.
· Utilized AWS CLI to automate backups of ephemeral data-stores to S3 buckets, EBS and create nightly AMIs for mission critical production servers as backups.
· Utilized various python libraries like boto3, NumPy to deploy several AWS resources like EC2 instances, RDS Databases, Subnets, Security Groups and IAM.
· Performed Onboarding migration for new clients into the Blackboard hosting using IBM Aspera Sync, automated process of clone creation for DB testing.
· Installed, configured and administered Jenkins Continuous Integration tool on Linux machines along with adding/updating plugins such as SVN, GIT, Maven and ANT.
· Integrated tools Subversion, Java, Ant for release management, including multi-platform support Developed and maintained the build and release system Created Promotion Models, Archives, Branches, and tags, also merged source code.
· Hands on experience in EC2, VPC, Subnets, Routing tables, Internet gateways, IAM, Route53, VPC peering, S3, ELB, RDS, Security Groups, CloudWatch, SNS on KUBE.

· Create AMI images of critical EC2 instances as backup.
· Monitored software, hardware, and/or middleware updates and utilizing technologies like Jenkins/Hudson, Ant, MSBuild, TFS Team Explorer and Subversion.
· Configured Apache tomcat server
· Involved in deploying JARs/WARs/EARs (backend) through Apache tomcat Application Server console.
· Managed all the bugs and changes in a production environment using the Jira tracking tool.
· Used Ant and Maven build tools to automate the build and deployment process.
· Wrote shell scripts for deployment process.
· Managed user accounts, partitioning, mounting, and maintaining file systems, system security, change management, documents, performance tuning of Red Hat Linux servers.