**Subhani Gulam**

**Sr Cloud/DevOps Engineer**

**PROFESSIONAL SUMMARY:**

* Skilled professional experience of **10 Years** in IT industry as a **Cloud DevOps**, Build and Release Engineer with Linux Systems Administrator experience in variety of cloud settings - Private, Public and Hybrid Cloud AWS, **GCP** & **Azure** platforms along with using various tools like Docker, Kubernetes, Ansible, Terraform, Argo CD, Jenkins, Git, & JIRA. Enthusiastic to work in a knowledge gaining and sharing environment.
* Experience in working with multiple Cloud platforms like **AWS, Azure and GCP** to implement the automation of manual processes using various **DevOps** tools and technologies.
* Experience in working as a **DevOps Engineer**, **Build & Release Engineer**, System Administrator operations process and tools area (**Code review**, **unit test automation**, **Build & Release automation**, **SCM**, Incident and Change Management).
* Experience on AWS platform and its dimensions of scalability including **EC2,** **S3, Route53, ELB, EBS, VPC, AMI, SNS, RDS, IAM**, **Auto Scaling, Cloud Front**, **Cloud Watch, Cloud Trail, Cloud Formation, OPSWork, Security Groups.**
* Experience in using build tools like **MAVEN** and **ANT** for the building of deployable artifacts such as war, jar& ear from source code.
* Extensively worked with automation tools like **Jenkins**, to implement the **End-to-End Automation**.
* Experienced in designing **roles** and **groups** for users and resources using **AWS** **Identity Access Management** (IAM). Managed multiple **AWS** accounts with multiple VPC's for both production and nonproduction where primary objectives included automation, build out, integration and cost control.
* **Scalability:** Harness is designed to scale with the needs of growing organizations, supporting the management of multiple applications and environments.
* Hands on experience on Azure VPN-Point to Site, Virtual Networks, Azure Custom security, Endpoint Security, firewall, Windows Azure name resolution, Scheduler, Automation and Traffic Manager, syncing On-premises Windows Server Active Directory to **Azure AD (AAD)** using Azure AD connect.
* 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.
* Experience in **migrating** infrastructure and application from **on premise** to **Azure** and from Cloud to Cloud such as AWS to Microsoft Azure.
* Experience working on **Azure Cloud services, Azure Data Factory, Azure Data Lake Analytics, Azure Data Bricks, GIT, Azure DevOps.** Managing Client’s Microsoft Azure-based PAAS and IAAS environment.
* Extensive experience in **Windows Azure** (IaaS) migrating like creating Azure **VMs**, **storage accounts, VHDs, storage pools**, migrating on premise servers to Azure and creating availability sets in Azure.
* Experience in dealing with **Windows Azure IaaS** - Virtual Networks, Subnets, Load balancers, Virtual Machines, Cloud Services, Resource Groups, Express Route, VPN, Load Balancing, Application Gateways, Auto-Scaling, and Traffic Manager.
* Hands-on experience in Configuration management with **Ansible**, writing cookbooks and playbooks to install **Apache** server, **JBoss, WordPress** for the same.
* Experience in writing **Ansible** playbooks, password-less SSH connection to nodes, running a shorter task in asynchronous mode, polling the tasks, add/remove cron jobs, running playbooks with ansible-playbook.
* Handled several **Docker** components like Docker Engine, Hub, Machine, Compose and Docker Registry and experience with **Docker** container service and Dockerized applications by creating Docker images from **Docker** file and running them to create the Docker containers and Docker consoles for managing the application life cycle.
* Used Docker in Source Code Management Workflows. Experienced in Installing, Configuring and Managing **Docker Containers, Docker Swarm, Docker Images** for **Web Servers** and **Application Servers** such as **Apache Tomcat** using **Docker** and integrated with **Amazon MYSQL RDS** databases.
* Develop an understanding of TCP/IP Networking concepts, Routing and Firewalls.
* Expertise in Virtualization technologies like **VMWare**, **Vagrant** and worked with containerizing applications such as **Docker**, **Kubernetes, etc.**
* Extensive involvement in Designing Azure Resource Manager Template and in designing custom build steps using PowerShell.
* Worked on Building/Maintaining **Docker** container clusters managed by **Kubernetes Linux**, **Bash,** **GIT**, **GITLAB, Docker**, on **GCP** (Google Cloud Platform). Utilized **Kubernetes** and **Docker** for the runtime environment of the **CI/CD system** to build, test deploy.
* Designed and deployed a highly available and fault tolerant infrastructure on **AWS** using **terraform** modules, these module's installs a web application in public subnet and database in private subnet which can communicate using the local route table in the **VPC**.
* Skilled in monitoring servers using Nagios, Splunk, Sumo Logic for Network **Monitoring**, Resource **Monitoring**and Log Trace **Monitoring**.
* Experienced on **Ansible** to configure the servers, **deploy** software, and orchestrate continuous deployments or zero downtime rolling updatesand automated to build, deploy the infrastructure.
* Expertise in migrating the existing v1(classic) Azure infrastructure into v2 (ARM), scripting and templating the whole end to end process. Migrated on-prems to Windows Azure by building Azure Disaster Recovery Environment, Azure Recovery Vault and Azure Backups from the scratch using PowerShell script.
* Experienced in Scripts like **Perl, Python, Bash, Java, Shell, Ruby, Groovy** and **YAML**.
* Experience on various testing frameworks like **JUnit**, various **Application Servers** like **WebLogic, WebSphere, JBoss and Apache Tomcat, Nginx**.
* **Harness** emphasizes automation in the software delivery process, allowing users to automate various stages of their release pipelines, from code integration to deployment.
* Deployed **Kubernetes** Clusters on cloud/on-premises environments using master/minion architecture and developed **YAML** files to build services like **pods**, **deployments**, **auto-scaling, load balancers, health checks, namespaces, etc.**
* Created and automated the **Jenkins pipeline** using **groovy script** for the micro service applications and owning the Activity of Upgrading, administering, plug-in management, and User Management and Job creation in **Jenkins**.
* Worked as Point of contact for production servers and provided **24X7 support** for production Env.
* Strong experience in System Administration, Installation, Upgrading Patches, Configuration, Troubleshooting, Security, Backup, Disaster Recovery, Performance Monitoring and Fine-tuning on **Red Hat** **Linux System.**

**TECHNICAL SKILLS:**

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| --- | --- | --- | --- |
| **Operating Systems** | | **Linux** (RedHat 4/5/6/7, CentOS, SUSE), UNIX [Solaris 11/10/9, HP-UX 11.23, 11.31, IBM-AIX (4.3/5.x/6.x/7.x)], Windows. | |
| **Cloud Environments** | | Amazon Web Services (**AWS**), Microsoft **Azure, GCP** | |
| **Application Servers & Web Servers** | | Apache, Tomcat, WebLogic, WebSphere, JBoss, Nginx | |
| **SCM Tools** | | **Git**, Subversion (SVN), Bitbucket. | |
| **CI/CD & Build Tools** | | **Jenkins**, Bamboo, Argo CD, Hudson, Helm, Flux, **ANT**, Gradle. | |
| **Testing Tools** | | Selenium, SonarQube. | |
| **Automation tools** | | **Chef**, **Puppet**, **Ansible**, Cloud Formation. | |
| **Container tools** | | **Docker**, **Kubernetes**. | |
| **Monitoring Tools** | | **Nagios**, **Splunk**, Cloud watch, CA Wily Introscope, Zabbix, **ELK** (Elasticsearch, Logstash, Kibana), Dynatrace. | |
| **Programming languages** | | **Python** | |
| **Scripting Languages** | | Perl, **Python**, Go, YAML, Ruby, PHP, Bash **Shell** scripting, Power**Shell**, JSON. | |
| **Bug Tracking Tools** | | **JIRA**, Bugzilla, Confluence. | |
| **configuration management tool** | | **Terraform.** | |

## PROFESSIONAL EXPERIENCE:

**Client: UHG, Addison, TX** 

**Role: AWS Devops Engineer March 2023– Present**

* Improved entire release process by automating all manual/time consuming steps with DevOps tools like**, Python, Docker, Git, Code Build, Code Pipeline,** and **AWS**.
* Worked with build Servers using **AWS**: Importing volumes, Launching EC2 instances, creating security groups, load balancers.
* Building the **AWS Infrastructure** using **VPC, EC2, S3, Route 53, EBS, Security Group, Auto Scaling and Lambda** in Cloud Formation.
* Extensively involved in infrastructure as code, execution plans, resource graph and change automation using **Terraform**. Managed **AWS** infrastructure as code using **Terraform**.
* Expertise in writing new plug-ins to support new functionality in **Terraform**.
* Designed roles and groups for users and resources using cloud permission systems AWS Identify Access Management **(IAM).**
* **Integration with Other Tools:** Harness integrates with a variety of popular tools in the DevOps ecosystem, enabling users to leverage their existing tools and infrastructure.
* Developing scripts for deployment of customer environments into **AWS**, using Bash and Python.
* Deployed AWS **Lambda function** with help of **BOTO3 Python** libraries to start and stop EC2 instances, applying permission policies and life cycles to S3 buckets.
* Created automated pipelines in AWS **CodePipeline** to deploy Docker containers in AWS **ECS** using services like **Cloud Formation, Code Build, CodeDeploy and S3**.
* Experience using **Terraform** for Infra Provisioning against **AWS**.
* Configured and maintained **Jenkins** to implement the **CI** process.
* Configured **GIT**, build scripts using **ANT** and **MAVEN** build tools with **Jenkins** and schedule jobs using POLL SCM option and integrated to automate the code checkout process.
* Built **Jenkins** jobs to create **AWS** infrastructure from **SCM** repos containing **Terraform** code.
* Used **Jenkins** 2.0 and pipelines, which helped us, drive all **Micro services** builds out to the **Docker** registry and then deployed to **Kubernetes**.
* Built additional **Docker** Slave nodes for **Jenkins** using custom built **Docker** images and instances.
* Written Templates for **AWS** infrastructure as a code using **Terraform** to build **lower environments** as well as **production environments**.
* Initiating alarms in **Cloud Watch** service for monitoring the server’s performance, CPU utilization, disk usage, etc.to take recommended actions for better performance. Managed different infrastructure resources, like physical machines, **VMs** and even **Docker** containers using **Terraform**.
* Implemented **Terraform** modules for deployment of various applications across multiple cloud providers and managing infrastructure.
* Used **Terraform** for automating **ELBs**, **Security Groups**, **SQS** Queues, **S3** Buckets, and continuing to replace the rest of our infrastructure.
* Setting up Continuous Integration and Continuous Delivery (CI/CD) for the Micro services using **Code Build** and **Code Pipeline** and containerized these services with **Docker** and **AWS** **ECR**.
* Worked on **Docker** container snapshots, attaching to a running container, removing images, managing Directory structures, and managing containers.
* Setting up **Kubernetes** platform with four clusters and providing assistance to various app teams
* Coordinate developers with establishing and applying appropriate branching, labeling/naming conventions using **GIT** source control.
* Working on **GitHub** related operations like creating repositories, cloning, merging, commit, pull, and push. Resolving the issues like merge conflicts.
* Worked with **Splunk** as a user to monitor the application server’s health and performance.
* Used **Jira** as ticket tracking, bug tracking, and work flow tool.

**Client: CVS Pharmacy, New York, NY May2022-Jan2023**

**Role: AWS DevOps Engineer**

**Responsibilities:**

* Experience on AWS cloud services like **EC2, S3, ELB, EBS, VPC, SQS, SNS, Red Shift, Route53,** Auto scaling groups, Cloud Watch, Cloud Front, **IAM** for installing configuring and troubleshooting various Amazon images for server migration from physical servers into cloud environment.
* Created AWS cloud formation templates to create organization AWS network from scratch with customized VPC, subnets, NAT gateways, internet gateways, Route tables, **ACL’s EC2 instances, ELB's**, security groups.
* Managed multiple AWS accounts with multiple VPC's for both production and non-prod where primary objectives included automation, build out, integration and cost control.
* Designed roles and groups for users and resources using **AWS Identity Access Management** (IAM) and managed IAM account (with MFA) and IAM policies to meet security audit & compliance requirements and managed network security using Security Groups and IAM.
* Writing **AWS Terraform** templates for any automation requirements in AWS services. Implemented multiple high-performance **MongoDB** replica sets on EC2 with robust reliability. Managed and supported AWS Security related issues, such IAM and S3 policies for user access.
* Developed and maintained highly scalable and fault-tolerant multi-tier AWS environments spanning across multiple availability zones using Terraform.
* Involved in configuration for **Web apps/Function apps, V-net integration, HCM,** Application gateway, App Insights, Active directory, **Azure Key Vault**, Encryption and Security on Azure.
* Installed Docker Registry for local upload and download of Docker images and even from **Dockerhub.** Worked closely with developers to pinpoint and provide early warnings of common build failures.
* Used to write YAML files in which I define multiple services of docker applications and used **docker compose**to launch those services in different Environments.
* Configuration of **Ansible modules for AWS cloud deployment**. Worked with Ansible playbooks for virtual and physical instance provisioning, configuration management, patching and software deployment on AWS environments through automated tools, **Ansible / custom pipeline**.
* Installed Splunk in production servers for logging purposes and built **Splunk dashboards** for application monitoring and used Splunk as a log monitoring tool for the Build, Test, and Deployment Environments.
* Involved in various aspects and phases of architecting, designing, and implementing solutions in IT infrastructure with an emphasis on **Azure and AWS cloud**.
* Created and configured management reports and dashboards in Splunk for application log monitoring.
* Created **Azure Automation Asset Graphical runbooks, PowerShell runbooks** that will automate specific tasks, deployed **Azure AD** Connect, configured ADFS authentication flow, **ADFS installation using AD Connect.**
* Monitored System/Application Logs of server using Splunk to detect Prod issues, responded to alerts, and configured threshold settings.
* Implemented & maintained the branching and build/release strategies using **SCM** tools **GIT, GitLab, Subversion, Bit bucket** and experienced in migrating Bitbucket repositories to **GitHub**.
* Developing and maintaining the build environment, the source code control system and managing build packages using **GIT and GIT Hub**.
* Developed Pipelines in **Azure data** factory using copy activity to load data.
* Developed Pipelines in **Azure** data factory to call stored procedures to transform data for reporting and analytics.
* Managed Nexus repository to download artifacts during builds in Jenkins and integrated Ant and GIT to deploy project related tags. Integrated **Maven/Nexus, Jenkins, Urban Code Deploy with Release for Git, Jira, and Cloud Foundry.**
* Developed build scripts using **Ant** as the build tool for the creation of (WAR files) build Artifacts and used **ANT** for perform daily and weekly Software Builds.
* Implemented **Python Scripts** using stranded libraries for getting all the agent logs (Inventory, Remote connections, and Network usage and performance counters) from the different flavors of **Linux.**

**Client: IBM India Dec2019 – Mar 2021**

**Role: AWS Cloud Devops Engineer**

**Responsibilities:**

* Worked on **Azure PaaS** Solutions like **Azure Web Apps**, Web Roles, Worker Roles, **SQL Azure** and Azure Storage. And managing Azure Storage Accounts and Creating **ARM** templates for Azure Platform.
* Worked on **Migrating servers, databases, Docker,** and applications from on premise to **Azure.**
* Working on Microsoft Azure in creating cloud environment and managing the application servers across Microsoft managed global data cent.
* Designed and configured **AZURE** Virtual Networks, subnets, network settings, DHCP address blocks, DNS settings, and Security policies and routing.
* Configured storage account, a vault, and a virtual network in **Azure**, enabled replication for individual VM, and monitored automated mechanisms within **Azure site recovery (ASR**) during the migration of **AWS based services onto Azure**.
* Setup Azure Devops for VMs applications migrating from on-prem. Azure Boards and Enterprise G**it integration**. **YAML** files for automation and **CI/CD**.**ARM** templates for managing the VMs, Key Vaults, Storage accounts.
* Implemented high availability with Azure Classic and Azure Resource Manager deployment models.
* Strong use of **Shell scripting** languages including **BASH for Linux** and **Mac platforms** and **PowerShell** for Windows systems
* Managing batch jobs in UNIX for data automated import/export of data and system automation programming using **Perl, Bash, Shell scripting** and automated log backup using **Python Boto3 API.**
* High availability with Azure Classic and Azure Resource Manager deployment models.
* Written templates for **GCP** infrastructure as a code using **Terraform** to build staging and production environments and automated infrastructure provisioning with Terraform and Packer by automating the image build process.
* Set up auto scaling of the instance group for **DEV/QA environments using GCP CLI** (Command line tools) and **GCP** cloud environments and provided proof of concept (POC) on creating server-less architecture with **GCP**.
* Implemented **Kubernetes** (k8s) clusters for running micro services and pushed micro services into **GCP Cloud** with **Kubernetes** backed Infrastructure and automation of **Kubernetes**clusters via playbooks in Ansible.
* Worked on Configuration management using **git, ansible playbooks, shell, and python scripts.**
* Installed and configured Jenkins tools on **Linux and windows platforms**, manage slaves and installing **Jenkins plug-ins.**
* Management and design of integrated build pipelines using continuous integration and continuous development workflows such as **Jira, Git, Jenkins, and Maven.**
* Integration of Automated Build with Deployment Pipeline.
* Have written **Terraform templates** that can spin up infrastructure for multi-tier application and provisioned boot strapped software on **Cloud with terraform**
* Worked on **Docker container** snapshots, attaching to a running container, removing images, managing volumes, linking containers, and managing containers.
* Implemented Configuration Management, Change Management policies and procedures.

**Client: SifyTechnologies, India Jan2017-Nov 2019**

**Role: Devops Engineer**

**Responsibilities:**

* Automated the deployments using scripts which execute the automated **CI** and release management process.
* Created a reusable deploy distribution for the system which can be ported to multiple environments without having the need to run separate builds.
* Automate **Deployment** using **Configuration Management** tool like puppet to provision amazon **AWS** Instances to enable continuous Deployments.
* Worked on Cloud automation using **AWS Cloud** Formation templates.
* Deploy and monitor scalable infrastructure on **Amazon web services** (AWS) & configuration management using **puppet**.
* Designed **Puppet** Modules to manage configurations and automate installation process.
* Worked on Installation and configuration of DevOps tool **Puppet**.
* Deployed DevOps using **Puppet**, **Dashboard**, and **Puppet DB** for configuration management to existing infrastructure.
* Worked on migrating on-premises applications to Azure cloud using Azure Migrate. Deployed Azure VM’s and other cloud services into secured VNet’s.
* Monitoring system based on **Docker**.
* Implementing a Continuous Delivery framework using **Jenkins**, **Puppet**, **Maven** and **Nexus** in Linux environment.
* Created monitors, alarms and notifications for **EC2** hosts using **Cloud Watch**.
* Created and maintained containerized micro services by configuring private container registry on Microsoft Azure for hosting images using Windows Active Directory.
* Wrote **Bash/Shell** scripts for managing day-to-day transactions & automation of routine tasks.
* Design solution from various system components using Microsoft Azure.
* Automate all the tool and Product and Integrate together required for company specific product through Cookbooks.
* Building **RHEL 5.x, 6.x and SUSE Linux 10** as a 4-node cluster from scratch using **HPSA** tool.
* Setup monitoring and alerting mechanisms for **AWS** and private datacenter infrastructure.
* Transitioned Infrastructure from private data center to Cloud (AWS).
* Experience with configuration management and automation tools (**Puppet**/ **Docker**).
* Integrated **GIT** into **Jenkins** to automate the code check-out process.
* Responsible for Database build, release and configuration.
* Perform Deployment of Release to various **QA**&**UAT** in Linux environments.
* Configured Elastic Load Balancers with **EC2** Auto scaling groups

**Client: Sapient, India**  **Apr 2015-Dec 2016**

**Role: Devops Engineer**

**Responsibilities**

* Worked on setting up multi-module projects to show the workflow and push the artifact to **Nexus** **snapshot**, **staging** and **release** repositories.
* Implemented Code migration **SVN** to **GIT** migration.
* Worked on GIT repository implementation. Defined branching strategies in **GIT** and implementation of best practices.
* Involved in Enterprise Collaboration-**DevOps** continuous integration and continuous delivery automation.
* Worked on integrating automated test, quality metrics and deployment in the software build process.
* Implemented **Docker** linking application and load balancing application.
* Worked on **Maven** build tool for building deployable artifacts such as **WAR/EAR** from source code.
* Coordinated Code deployments with DEV and QA teams.
* Worked on setting up the projects in **GIT/STASH**, created POM.xml file and integrating with **Jenkins** for continuous integration.
* Involved in standardization for build artifact management and build configuration.
* Worked on setting up **Nexus staging Suite** for build artifact management.
* Worked on **GIT/Stash** and **GitHub** Migration and created Hitchhiker’s guide to STASH.
* Used **SONAR** and integrated with **JENKINS** for the code quality monitoring.
* Worked on Amazon **AWS** Cloud Administration which includes services: **EC2**, **S3**, **EBS**, **VPC**, **Route53**, **Auto** **Scaling**, **Security** **Groups** and **Cloud** **Formation**.
* Created **S3** buckets and managed policies for **S3** buckets. Utilized **S3** buckets and Glacier for Storage and backup on **AWS.**
* Installation, configuration and supported the various open source and COTS continuous integration, continuous delivery tools for version control, configuration control and code control.

**Bachelor of Commerce (Computers) Pass out 2013**