**Syed hyder owaisuddin**

**Sr. Cloud-DevOps Engineer**

**Short Summary:
Sr Cloud DevOps Engineer** expert with **8 years'** experience in **AWS, Azure, and GCP** environments, specializing in **cloud** **adoption**, **CI/CD** implementation, and infrastructure automation. Proficient in **AWS services**, **CloudFormation**, **Azure** **IaaS**, and **Terraform** for efficient provisioning. Skilled in **Docker**, **Kubernetes**, **Ansible**, and **Jenkins** **Pipelines** for seamless deployments and orchestrating **Microservices** builds. Extensive expertise in monitoring tools such as **Splunk**, **Nagios**, **CloudWatch**, and **ELK**. Dedicated to 24/7 support, production server management, and strategic upgrades.

**Professional summary:**

* Experience in **AWS** cloud services like Virtual Private Cloud, Public and Private Subnets, Security Groups, Route Tables, Elastic Load Balancer to host & support Enterprise Data Warehouse.
* Experienced in provisioning **AWS** infrastructure using cloud formation templates and creating underlying infrastructure that consists of VPC’s, subnets, EC2, security groups, ELB, NACL, NAT Instance and Route 53.
* Experience in Microsoft **Azure** IaaS provisioned Virtual Networks, Virtual Machine Scale Sets, Container Instances, CLI, Traffic Manager, Monitor, Application Insights, Route, Application Gateways and Auto-Scaling.
* Experience in creating **Azure** Resource Groups using **Resource manager** for monitoring resources within resource group.
* Experience in **Azure** storage services, Blob and File Storage, Setting up of Azure CDN and load balancers.
* Experience in managing users with azure **active directory**, providing single sign on of SaaS, securing keys with **Azure** **key vault**.
* Hands on experience in creating pipelines in **Azure Data Factory** V2 using activities like Move &Transform, Copy, filter, for each, Get Metadata, Lookup, **Data bricks** etc.
* Extensively Worked as an Azure Data Engineer using Azure Cloud, Azure Data Factory, Azure Data Lake Storage, Azure Synapse Analytics, Azure Analytical services, Azure Cosmos, NO SQL DB, Azure HDInsight,  Big Data Technologies (Hadoop and Apache Spark) and Data bricks.
* Experience As Developer using Big Data Technologies like Databricks/Spark.
* Good understanding of Spark Architecture with Databricks, Structured Streaming. Setting Up AWS and Microsoft Azure with Databricks, Databricks Workspace for Business Analytics, Manage Clusters In Databricks.
* Expertise in Azure Scalability and Azure Availability - Build VMs availability sets using the Azure portal to provide resiliency for **IaaS** based solution and Virtual Machine Scale Sets (VMSS) using Azure Resource Manager (ARM) to manage network traffic
* Expertise in building CI/CD on **AWS** environment using AWS Code Commit, Code Build, Code Deploy and Code Pipeline and experience in using CloudFormation, API Gateway, and Lambda in automation and securing the infrastructure on AWS
* Utilize **AWS** CLI to automate backups of ephemeral data-stores to S3 buckets, Glacier, EBS and create nightly AMI’s.
* Implemented systems that are highly available, scalable, and self-healing on the **AWS, Azure** platforms.
* Created Cloud Firewall rules to allow the IP traffic to GKE Kubernetes on Compute Engine, NACL for network whitelisting. Stack Driver monitoring, Cloud Data Flow push the logs into **GCP** Cloud Storage.
* Designed and implemented secure Kubernetes networking using Kubernetes Network Policies and GCP VPCs for pod-to-pod and pod-to-service communication.
* Set up and managed Ingress controllers on GKE to manage external traffic using GCP Load Balancers.
* Integrated GKE with Google Cloud IAM, ensuring granular access controls using RBAC (Role-Based Access Control) policies.
* Implemented a CI/CD pipeline using **Azure DevOps** (VSTS, TFS) in both cloud and on-premises with **GIT**, MS Build, **Docker**, **Maven** along with **Jenkins’s** plugins
* Extensively created multiple **Terraform** modules to manage configurations, applications and automate installation process.
* Experience 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
* Created custom **Docker** container tagged images and pushed the images to registry and deployed on Azure ACS.
* Experienced in using software containerization platform, precisely **Docker** and container orchestration tool like **Kubernetes** and deployed Kubernetes Cluster on Azure cloud with master/minion architecture.
* Used **Jenkins** pipelines to drive all micro services builds out to the **Docker** registry and then deployed to **Kubernetes.**
* Expertise in implementing a production ready, highly available, fault-tolerant **Kubernetes** infrastructure and Worked on Scheduling, deploying, and managing container replicas on a node cluster using Kubernetes.
* Experience in using containerization tools like **Docker** for deployment and build web applications, those can run consistently across any machine, have knowledge of containerization orchestration using **Kubernetes**.
* Experienced on **Ansible** to configure the servers, deploy software, and orchestrate continuous deployments or zero downtime rolling updates and developed many roles and playbooks in **Ansible** and automated to build and deploy infrastructure.
* Extensive experience in installing, configuring, and administering **Jenkins** CI tool on Linux machines and used **Jenkins** Pipelines to drive all Microservices builds out to the Docker Registry and then deployed to **Kubernetes**,
* Experience with creating CI/CD processes using **Jenkins,** and **GIT** Plugin for version control, **Nexus, JFrog** for Artifacts**, ANT, Maven** and **Gradle** builds for deployment in Java and managing application using **WebSphere, Tomcat**.
* Created **Shell scripts** (Bash), Groovy, YAML, Ruby, Python and PowerShell for automating tasks.
* Experienced with **monitoring tools** like Splunk, Nagios, CloudWatch and ELK.
* Worked as Point of contact for production servers and provided **24X7** support for production servers and upgrades, patching.

**Technical Skills:**

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| --- | --- |
| Version control | Git, SVN, Bitbucket, Azure repo, Code Commit |
| Configuration tools | Ansible, Puppet, Chef |
| Integration and Deploy tools | Jenkins, Azure pipelines, Octopus deploy |
| Cloud services | Microsoft Azure, AWS, GCP |
| Containerization management | Docker, Kubernetes, |
| Database management | Oracle, SQL, MongoDB, DynamoDB, Cosmos DB, NoSQL |
| Monitoring tools | Splunk, Nagios, Cloud watch, Azure Insights |
| Build tools | Maven, ANT, Gradle |
| Artifact managing tools | Nexus, NPM, JFrog |
| Testing tools | Cucumber, Junit, Selenium |
| Reporting and ticketing tools | Service Now (SNOW), Jira, Bugzilla, Azure DevOps, HPQC, Confluence |
| Operating systems | Red Hat Linux 5.x, 6.x,7.x, CentOS, Ubuntu |
| Languages | Python, Java, Shell, Perl, HTML, Power shell |
| Web/Application Servers |  Apache Tomcat, WebSphere, Web logic, IIS and JBoss |
| Networking | TCP/IP, DNS, NIS, NIS+NFS, SMTP, LAN, FTP/TFTP, SFTP, DHCP, TELNET |
| Cloud provisioning tools | Terraform, CloudFormation, Azure Resource Manager, Packer |

**Certifications:**

* **AWS Solutions Architect Associate**

**Professional experience:**

**Cloud-DevOps Engineer: Mar 2024 – Present**

**Corteva, Johnston, IA**

As a part of Cloud Automation Engineer in our digital Platform and to help our customer onboarding. Our Platform is based upon the latest advances in software and infrastructure architecture, including Cloud Native development, Infrastructure as Code, Containers and Micro Services movements and related platforms and tools such as AWS, Terraform, DevOps, Kubernetes

**Responsibilities:**

* Architecting and implementing **Azure IaaS** - Virtual Networks, Virtual Machines, Resource Groups, load Balancing, VMSS, Auto-Scaling, Security Groups, private endpoints, DNS, private link service and log analytics.
* Leveraged **Azure Services** not limited to Azure AD, Storage, Key Vault and Application Insights, Azure Functions, Web app, AZURE DevOps, Azure gateway API, and Azure Data Services including Cosmos DB, Azure Redis Cache
* Integrated **Azure Log Analytics** with Azure VMs for monitoring the log files, store them and track metrics. Designed **Network Security Groups** to control inbound, outbound access to network interfaces (NICs), VMs and subnets
* Created MySQL **Packer** image cloning the MySQL binary file and automated build and release the image into shared image gallery using **Terraform** and **Azure DevOps** jobs.
* Created CI/CD Pipelines in **Azure DevOps** environments by providing their dependencies and tasks
* Synchronize **MySQL backup** files into **S3 buckets** andadded lifecycle policies.
* Wrote **bash shell** scripts to create configuration, backup, ORT, validation script for MySQL and created CRON jobs
* Performed **Operation Readiness testing** (ORT) **and ASPR** complaints on the **Packer** AMI image created.
* Automated the creation of **Azure IAAS** using terraform by triggering the infrastructure using Terraform and utilized **YAML** to create dependencies, layers and configure the pipeline YAML file.
* Worked on **Databricks** tool in developing Spark applications using **pyspark** and spark **SQL** for data extraction, transformation, and aggregation from multiple file formats for analyzing and transforming the data to uncover insight into the customer usage patterns.
* Used Azure Data warehouse, Hive, Presto, Dremio, Snowflake, Azure blobs, AWS Redshift, GCP Big Query to feed BI reporting.
* Ability to write SQL queries against Snowflake, and A solid experience and understanding of architecting, designing and operationalization of large-scale data and analytics solutions on Snowflake Cloud Data Warehouse.
* Loaded the tables from the azure data lake to azure blob storage for pushing them to snowflake.
* Set up centralized logging for Kubernetes clusters using Google Cloud Logging and Monitoring to track system health, performance, and troubleshoot issues.
* Configured Prometheus and Grafana for real-time monitoring of clusters, including custom metrics from pods and services running on GKE.
* Implemented automated alerting using Google Cloud Monitoring to notify teams of performance degradations or outages.
* Maintain cloud resource access utilizing **RBAC** based security leveraging **Azure Active Directory.**
* Implemented **Argo Workflows** to streamline and automate complex workflows within the organization.
* Designed and orchestrated workflows for continuous integration, deployment, and other automation processes.
* Deployed and configured **MinIO**, an open-source object storage solution, for scalable and cost-effective storage.
* Configured **Argo Workflows** to interact seamlessly with **MinIO** buckets, enhancing the efficiency of data processing steps.
* Integrated **Supervise** with deep learning frameworks and libraries for seamless model development.
* Utilized **Supervise Ly’s** annotation tools for image and video datasets, ensuring accurate and high-quality training data.
* Used **Terraform Modules** in the registry to create Auto shut Down, VM, Resource group and entire azure infrastructure.
* Configured **SMTP** to send mail commands, Communication Host to host all the servers using **SSH** private and public key
* Deployed microservices based applications on **AWS Kubernetes** by using **EKS**, Ingress API Gateway, MySQL databases and Cassandra DB for stateless storage of external data, and setup reverse proxy **Nginx** servers.
* Deployed and managed **Cassandra** nodes and clusterson AWS platform and on-prem to automated multiple tasks using **terraform and ansible** playbooks using azure Devops.
* Evaluated **Kubernetes** for Docker container orchestration and Integrated **Docker** container orchestration framework using Kubernetes by creating pods, config maps, and deployments.
* Managed Kubernetes charts using **Helm**, and Created reproducible builds of the **Kubernetes** applications, managed Kubernetes deployment and service files and managed releases of **Helm** packages
* Created Clusters using **Kubernetes** and worked on creating many pods, replication controllers, replica sets, services, deployments, labels, health checks and ingress by writing Yaml files.
* Performed **performance testing** using **Sysbech** to compare the performance between on premises and Azure IAAS.
* Monitored VM’s using **Azure Monitor** and created Alerts and Dashboard by installing **Telegraph** agent in the VM’s and wrote **Kusto queries** to sort, filter by time, process log data and return results.
* Worked on the monitoring tools and visualization tools using **Prometheus and Grafana** and monitored the Kubernetes pod metrics in regular intervals of time.
* Set **MySQL and Cassandra** environment on **Red Hat Linux**, while ensuring that these systems adhere to organizational standards and policies to create Azure Cloud IAAS.

**Environments:** Azure (VM, NSG, Vnet, Key Vault, Gateway, Functions), AWS (EC2, Lambda, EKS, S3), Power Shell, Azure AD, MySQL, Cassandra, Azure Monitor, Grafana, Packer, Prometheus, Azure Kubernetes Service, Docker, Azure DevOps, RedHat 7/8, Terraform, Ansible, Docker, Shell, Kubernetes, Python, YAML, Git, Jira, Maven

**DevOps Engineer: Aug 2023 – Jan 2024**

**Independent Health, Buffalo, NY**

As a Cloud-DevOps Engineer and part of Architecture DevOps team we partner with other development teams to help improve and standardize DevOps practices, provide architectural solutions, and support cross-product teams technical initiatives

**Responsibilities:**

* Implemented a **CI/CD** pipeline with Docker, Jenkins, GitHub, and Azure Container Service, whenever a new GitHub branch gets started, **Jenkins**, our Continuous Integration (CI) server, automatically attempts to build a new **Docker** container from it.
* Worked with **Terraform** Templates to automate the **Azure IAAS** virtual machines using terraform modules and deployed virtual machine scale sets in production environment.
* Worked on building highly automated infrastructure using automation frameworks using **ARM** Templates & Terraform.
* Written **Templates** for Azure Infrastructure as code using **Terraform** to build staging and production environments.
* Integrated **Azure Log Analytics** with Azure VMs for monitoring the log files, store them and track metrics and used **Terraform** as a tool, managed different infrastructure resources Cloud, **VMware**, and **Docker** containers.
* Worked on **Serverless** services, created and configured HTTP Triggers in the **Azure** Functions with application insights for monitoring and performing load testing on the applications using **Azure DevOps** Services.
* Using **Ansible** created multiple playbooks for machine creations and SQL server, cluster server and my SQL installations.
* Written **Ansible** handlers with multiple tasks to trigger multiple handlers and to decouple handlers from their names, making it easier to share handlers among **Playbooks** and Roles
* Incorporated creating inventory, planning employments and job templates utilizing **Ansible Tower.**
* Deploying windows **Kubernetes** (K8s) cluster with **Azure Container Service** (ACS) from Azure CLI and Utilized **Kubernetes** and **Docker** for the runtime environment of the CI/CD system to build, test and Octopus Deploy.
* Used **Azure Kubernetes Service** to deploy a managed Kubernetes cluster in Azure and created an **AKS** cluster in the Azure portal, with the Azure CLI, also used template driven deployment options such as Resource Manager templates and **terraform**.
* Managed **Kubernetes** charts using **Helm**, Created reproducible builds of the Kubernetes applications, managed Kubernetes manifest files and Managed releases of **Helm** packages.
* Created multiple **Terraform** modules to manage configurations, applications and automate installation process for VNets, web Servers and **Azure** Virtual Machines, Virtual Machine Scale sets, load balancer.
* Used **Jenkins** and pipelines to drive all micro-services builds out to the **Docker** registry and then deployed to Kubernetes, Created Pods and managed using **oraclenetes**
* Designing the Centralized Compute/storage/Processing power for mult­i solutioning platforms using **Kubernetes** and ingress.
* Deployed **Kubernetes** Cluster on Azure cloud with master/minion architecture and wrote YAML files to create many services pods, deployments, auto scaling, load balancers, labels, health checks, Namespaces and Config Map.
* Installed and configured **Splunk** for log monitoring and also forwarded system stats to **Splunk** indexer, created dashboards and alerts using this data.
* Worked with **Nagios** for Azure Active Directory & LDAP and Data consolidation for LDAP users. Monitored system performance using **Nagios**, maintained **Nagios** servers, and added new services & servers.
* Evaluated **Kubernetes** for Docker container orchestration and Integrated **Docker** container orchestration framework using Kubernetes by creating pods, config maps, and deployments.

**Environment:** Azure (Web Roles, Worker Roles, SQL Azure, Azure Storage, Azure AD, Resource Groups, Office365, RBAC), Ansible, Docker, Kubernetes, Maven, Jenkins, GIT, Cassandra, Python, Jira, Splunk.

**AWS-DevOps Engineer: May 2018 - July 2022**

**Integrity Spirit, Hyderabad, India**

As a DevOps Engineer worked to develop, enhance, and maintain the build, deployment and configurations for continuous integration. Worked on integrating systems with AWS cloud and adopting to cloud environment.

**Responsibilities:**

* Responsible for designing security roles of **AWS** users using IAM by manage Users, assigning roles, groups and policies using AWS Identity and Access Management (IAM).
* Designed and configured virtual machines utilizing layouts, Hot Clone, Cold Clone, Cold Migration and Engineer, implement and supported **AWS** EC2, S3, Auto scaling, CloudFront, CloudWatch varying.
* Monitored applications and created alarms to watch the metrics for **AWS** EBS, RDS, EC2, ELB and S3.
* Created and accessed resources and used **AWS** **Glacier** for documenting information through **AWS CLI.**
* Implemented server less architecture using **API Gateway, Lambda and Dynamo DB** & deployed AWS **Lambda** code.
* Created **CloudFormation** (CF) scripts to deploy framework dependent on VPC setups.
* Involved in for various **Chef Cookbooks DB** configurations to modularize and optimize end product configuration, converting production support scripts to Chef Recipes and **AWS server** provisioning using Chef Recipe.
* Configured a virtual data center in the Amazon Web Services (**AWS**) cloud to support Enterprise data warehouse hosting including VPC, Public and Private Subnets, Gateways, Security Groups, Route Table, Elastic Load Balancer.
* Utilized **AWS** CLI to automate backups of data stores to EBS and create AMI’s for critical production servers as backups.
* Worked on Automating the EDSM data submission process using **AWS** **S3**, bucket policies, lambda, SQS, ECS and EMR.
* Worked on automating the measures calculation for QIP using **AWS S3**, EMR, zeppelin and Neo-4j.
* Created Dashboards, alarms for all **AWS** services to support performance testing.
* Used puppet for setup the board of hosted instances in **AWS.**
* Configured local Maven repositories and multi-component **ANT** projects with **Nexus** repositories and scheduled projects in Jenkins for continuous integration.
* Worked on the creation of custom **Docker container images**, tagging, and pushing the images and Dockers consoles for managing the application of life cycle.
* Worked to improve horizontal scalability and optimized speed and consistency by deploying **Kubernetes** pods to break up 70% of legacy monolithic applications into microservices.
* Utilized **Kubernetes and Docker** for the runtime environment of the CI/CD system to build, test and **Octopus Deploy**.
* Worked on leveraging TFS (Team Foundation Server) environments using **Visual Studio, .NET** and Microsoft SQL Server.

**Environment**: AWS, EC2, S3, RDS, Docker, Kubernetes, Tomcat, Jenkins, Ansible, Terraform, Python, Groovy, Linux, Shell, Helm, CloudFormation, Jira, Git, ELK, Splunk.

**Build/ Release Engineer: Jan 2017 - April 2018**

**Integrity Spirit, Chennai, India**

 **Responsibilities:**

* Consuming and exposing various Web services using **JAX-RS** and **JSON** to different systems for business services.
* Extensively worked with core **java** like collections, String Builder, and interfaces
* Developed complex Web Services and tailored **JAX-RS** API to suit the requirement.
* Development of UI models using **HTML, JSP, JavaScript, AJAX, Web link** and **CSS.**
* Worked with development/testing, systems/infrastructure and project teams’ continuous operation of build and test systems.
* Worked on the **Oracle** databases in the backend to execute the DMLs and DDL
* Assisted Database Developers using **PL/SQL** for managing data associated with the tables.
* Used **JDBC** to connect to the Oracle database and **JNDI** to lookup administered objects.
* Researched and implemented code coverage and unit test plug-ins with **Maven/Jenkin**
* Involved in **J2EE** Design Patterns such as Data Transfer Object (DTO), DAO, Value Object, and Template.
* Used **Spring IOC, AOP** modules to integrate with the application.
* Developed **SQL** Queries for performing **CRUD** operations in Oracle for the application.
* Used **Maven** for generating system builds and Bamboo for continuous integration.
* Used **LOG4J**, JUnit for debugging, testing, and maintaining the system state.
* Wrote **JUnit** Test cases for Spring Controllers and Web Service Clients in Service Layer using Mockito

**Environment**: Ant, Java/J2EE, Maven, Jenkins, Linux, Solaris, Python, WebSphere, Shell scripting