**MOHSIN ABBAS**

**+1 630-935-5881**

**mohsin1abbas95@gmail.com**

**Professional Summary:**

* 4+ years of IT Industry experience with a Strong understanding of Software Development Life Cycle (SDLC) and Software Testing Life Cycle (STLC). Worked with optimization of server resources, Amazon Elastic Cloud instances and website security, Web services /REST, and Amazon AWS.
* Expertise in managing security on cloud services using WAF’s and Advanced shield and VPC on EC2-Instances.
* Excellent experience with AWS provisioning, operations, and management of AWS environments.
* Expertise in creating DR plans in cloud environment.
* Deploying and managing systems on cloud computing platforms primarily focused on Amazon Web Services and Azure Cloud Services.
* Very Strong Experience in configuring, develop and deploying Enterprise Java Beans in WebSphere/WebLogic App Servers, Tomcat and TC server.
* Experience in Querying RDBMS such as Oracle, DB2, MY SQL and SQL Server by using SQL for data integrity.
* Experience in Automating the Build Infrastructure for deploying services in docker environment using Jenkins, Sonarqube, Gradle, Groovy, Job DSL, Docker and Splunk.
* Expertise in creating Microsoft Active Directory in windows server from WS (2008-2016).
* Strong background in implementing and administrating Microsoft based technology, server infrastructure and its fundamentals, Services and concepts.
* Extensive experience with Amazon Web Services (AWS) and its services, maintaining and improving infrastructure, split between physical data centers, and AWS and managing full AWS lifecycle, provisioning, automation and security.
* Hands on experience on Azure Migration.
* Expertise in setup and implementation of concept of monitoring and logging. Specially using
* tools like - Grafana, Prometheus, Nagios, Zabbix
* Extensively worked on Jenkins for Continuous Integration and on tools Gulp and Jasmine, for Test Automation for JavaScript and Selenium for Java projects
* Experience in using OpenStack CLI to interact with OpenStack Services like Nova, Neutron, Horizon, Cinder, Heat, Keystone and having experience in provisioning and optimizing of compute, network, and storage services with OpenStack through dashboard, command-line and API utilities.
* Experience in implementing systems that are highly available, scalable, and self-healing on the GCP platform.
* Experience with various CICD Tools: Jenkins, Git, Artifactory, Ansible, Chef/Puppet and Docker.
* Experience in developing Cookbooks, Recipes, Resources and Run lists, managing the Chef Client nodes, and upload the Cookbooks to chef-server from Workstation.
* Experience in using Puppet to automate repetitive tasks, quickly deploy critical applications, proactively manage, change and create custom Puppet module skeletons.
* Experience in AWS Cloud platform and its features which includes EC2, VPC, EBS, AMI, SNS, RDS, EBS, Cloud Watch, Cloud Trail, Cloud Formation AWS Config, Auto scaling, Cloud Front, IAM, S3.
* Exposure on the web services like REST and SOAP and protocols like TCPIP, LDAP.
* Good understanding of Open shift platform in managing Docker containers and Kubernetes Clusters.
* Experience in writing Ansible playbooks, created inventories, custom playbooks written in YAML language, encrypted the data using Ansible Vault and maintained role-based access control by using Ansible Tower and Implemented IT orchestration using Ansible to run tasks in a sequence which can work on different servers.
* Experience with container-based deployments using Docker, particularly working with Docker images, Docker Engine, Docker Hub, Docker Machine, Docker Compose, Docker weave, Docker swarm and Docker registry and deployed using spring boot applications.
* Experience with Docker and Vagrant for different infrastructure setup and testing of code.
* Experience working on Continuous Integration and Continuous deployment using various CI Tools like Jenkins, Bamboo and Integrated Jenkins with the version control tools to pull the latest pushed code.
* Experience in using JENKINS CI/CD PIPELINES, MAVEN and ANT as a Build Tool for the building of deployable nexus and artifacts (war, jar & ear) from source code.

**Technical Skills:**

**DevOps Tools:** Git, GitHub, Jenkins, Maven, Docker, Ansible, Kubernetes, Nagios, and Terraform.

**Cloud Platforms:** Amazon Web Services: EC2, IAM, Elastic Beanstalk, Elastic Load Balancer (ELB), RDS, DynamoDB, S3, SQS, SNS, Cloud Formation, Route 53, VPC, Cloud Watch, Lambda, VMware.

**Operating Systems:** Red Hat Linux, Ubuntu, CentOS, Windows.
**Web/Application Servers:** Tomcat, Apache, Nginx, WebSphere,
**Database:**  MySQL, SQL Server, DynamoDB

**Open-Source Technologies:** Cassandra, Redis, ArangoDB, Amazon DynamoDB **Languages, Tools & Other:** Python, Ruby, YAML, JSON, PowerShell, wsadmin, jacl, jython, VB Script

**AWS Certifications in Progress.**

**Education: -**

**Bachelor of Science in Computer Science**

**University of Illinois at Chicago Graduated: December 2019**

**Professional Experience:**

**Cigna, Windsor, CT                         Jul 2021 to Present**

**Role: AWS DevOps Engineer**

**Responsibilities:**

* Creating, configuring, and deploying instances on the AWS environment, also handling CloudWatch, Elastic Search, and managing security groups on AWS.
* Provide highly durable and available data by using S3 data store, versioning, and lifecycle policies, and create Amis for mission-critical production servers for backup and maintaining the user accounts IAM, RDS, Route 53, VPC, RDB, Dynamo DB, SES, SQS and SNS services in AWS cloud.
* Expertise in AWS services such as EC2, Lambda, EKS, ECS, ECR, and Fargate, coupled with experience of Terraform, Docker, and Kubernetes
* Experience in administration of Production, Development & Test environments working in various flavors of Linux and Unix like RHEL 5. x, 6. x, 7. x, SUSE Linux, Ubuntu, CentOS, AIX 5.2 /5.3 /6.1 /7.1 and Solaris 9, 10.
* Set up and maintained Logging and Monitoring subsystems using tools like Elasticsearch, Kibana, Prometheus, Grafana, and Alert manager.
* Used Terraform to set up the AWS infrastructures such as launching the EC2 instances, S3 bucket objects, VPC, Subnets, etc.
* Designed AWS Cloud Formation templates to create custom-sized VPC, Subnets, and NAT to ensure successful deployment of Web applications and database templates.
* Developed customer facing web application using ASP.NET 4.0 C# and convert to XML data file.
* Created functions and assigned roles in AWS Lambda to run Python scripts, and AWS Lambda using Java to perform event-driven processing.
* Created IAC solutions through AWS CDK, AWS CloudFormation, AWS CLI, or Terraform leveraging configuration management solutions such as Ansible.
* Strong knowledge of TCP/IP, UDP, DNS network, load balancing, firewalls and enterprise monitoring tools Splunk.
* Design and Develop ETL Processes in AWS Glue to migrate Campaign data from external sources like S3, ORC/Parquet/Text Files into AWS Redshift.
* Installed Jenkins on a Linux machine and created a master and slave configuration to implement multiple parallels builds through a build farm.
* Implemented enterprise tools using GitHub Actions and GitHub Self-Hosted Runner using ECS and EKS.
* Used Kubernetes to provide a platform for automating deployment, scaling, and operations of application containers across clusters of hosts.
* Implemented a Continuous Delivery pipeline with Docker, Jenkins, GitHub, and AWS AMIs, whenever a new GitHub branch gets started, Jenkins, our Continuous Integration server, automatically attempts to build a new Docker container from it.
* Created and Maintained pipelines to manage the IAC for all the applications.
* Developed DevOps Scripts in Groovy to automate and collect analysis of Cassandra.
* Hands-on experience in creating EC2 instances with Cloud Formation templates and terraform.
* Used C# development skills to translate the needs of development into Puppet code for deployment.
* Creating CloudWatch alerts for instances and using them in Auto-scaling launch configurations.
* Developed Shell/Python and PowerShell scripts for automated deployments on Windows environments.
* Worked on installing Docker using the Docker toolbox and worked on the creation of Docker containers and Docker consoles for managing the application life cycle.
* Build a CI/CD pipeline to automate the process using the python and Bash scripts.
* Worked with Docker and Kubernetes on multiple cloud providers, from helping developers build and containerize their application (CI/CD) to deploying either on a public or private cloud.
* Defined AWS Lambda functions for making changes to Amazon S3 buckets and updating the Amazon DynamoDB table.
* Wrote Ansible playbooks to launch AWS instances and used Ansible to manage web applications, and configuration files used mount points, and packages and worked on playbooks for Ansible in YAML.
* Performed installation and managed Grafana to visualize the metrics collected by Prometheus.
* Involved in Configuration Automation and Centralized Management with Ansible, Implemented Ansible to manage all existing servers and automate the build/configuration of new servers.

**Environment: ​**AWS, Docker, Kubernetes, Jenkins CI, Ansible, Jira, Gitlab, SonarQube, Rancher

**Charles Schwab, Austin, TX                                 Feb 2020 to Jun 2021**

**Role: DevOps Engineer**

**Responsibilities:**

* Worked on AWS Cloud Formation templates to create custom-sized VPC, subnets, EC2 instances, ELB, and security groups. Worked on tagging standards for proper identification and ownership of EC2 instances and other AWS Services like Cloud Front, Cloud Watch, OpsWorks, RDS, ELB, EBS, S3, glacier, Route53, SNS, SQS, KMS, Cloud Trail, and IAM.
* Set up GCP Firewall rules in order 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.
* Designed AWS Cloud Formation templates to create custom VPC, Route Tables, NACLS, IGW, NAT Gateway, and NAT Instance.
* Developed custom solutions in C# and PowerShell to validate availability, consistency, and compliance of environments.
* Strong experience of Serverless SQS, Lambda, EKS, ECS, ECR Fargate, and DevOps CICD tools.
* Developed a solution for IAC Drift detection for CloudFormation Stack and correction of drifted resources using Jenkins and AWS Lambda.
* Hands-on experience in creating custom DNS with DHCP option sets in VPC with physical location DNS servers.
* Hands-on creating and monitoring site-to-site VPN connection from VPC to different networking devices on physical location.
* Experience in utilizing BASH Scripts and Rightscale to do initial server provisioning.
* Configuring JUnit coverage report and Integration Test cases as part of the build in GitLab Runner.
* Experience in Designing, Architecting, and implementing scalable cloud-based web applications using AWS and GCP.
* Designed and built a continuous integration and deployment framework for Chef Code using test-driven development.
* Excelled in creating peering connections with VPCs from another account and other VPCs in the same account.
* Experience in Cloud development and automation using Node JS, Python (Boto3), AWS Lambda, AWS CDK (Cloud Development Kit), and AWS SAM (Serverless Application Model)
* Excellent experience with windows & Linux (Ubuntu, RedHat, CentOS) EC2-instances environment.
* Experience in installing software on windows & Linux EC2 instances and troubleshooting connectivity issues by opening specific ports related to application and user account permissions.
* Utilized Kubernetes and Docker for the runtime environment of the CI/CD system to build, test deploy.
* Designing, implementing, and maintaining Amazon resources: EC2, RDS (Postgres), Redshift, Redis, Route 53, Lambda, and S3.
* Experience in setting up Baselines, Branching, Merging, and Automation Processes using Shell/Bash and Batch Scripts.
* Hands-on experience automating AMIs of EC2-Instance using lambda on a scheduled basis.
* Solving various .Net application issues and providing various technical solutions for C#, TFS and Microsoft IIS.
* Developed build and deployment scripts using ANT and MAVEN as build tools in Jenkins to move from one environment to another environment.
* Integrate new application changes to existing servers by performing deployments using tools such as Octopus Deploy and TeamCity.
* Created Auto Scaling groups of recent AMIs and health checks as ELB to provide high-Resilience to all EC2 instances and provide scalability based on CPU to adapt to unforeseen spikes without having an outage or needing manual intervention.
* Used Infrastructure as Code pattern IaC to automate the Architecture.
* Maintained build-related scripts developed in ANT, Python, and Shell. Modified build configuration files including Ant's build.xml.
* Developed a solution for implementing SonarQube using ECS Fargate.
* Used REST APIs to get the data from different sources, and ingested the data into Splunk
* Deploying the Microservices in Cloud (Confidential GCP, Amazon AWS) using Docker - Kubernetes / Git, Jenkins, Chef / Puppet. Serving ML Models in GCP AI Hub.
* Support the development team with deployment workflow and continuous integration using GitLab, GitLab-ci, Docker, and Salt Stack provisioning.
* Played a key role in implementing Cloud Watch, Cloud Trail, Auto Scaling, and Redshift Architecture.
* Configured EC2 Windows SQL standard server and joined to a domain, performing administration tasks restoring and taking backup of the database as well troubleshooting connectivity issues between application and database server.
* Experience in Google Cloud components, Google container builders and GCP client libraries, and cloud SDKs
* Configured file-sharing servers with windows EC2 instances using WebDAV and managed security using domain IIS.
* Hands-on experience in creating shadow copying on EC2windows instances for backup purposes.
* Excellent experience on all S3 storage types. S3-Standard, S3-IA, S3- Intelligent tiering, Glacier, Deep-Glacier using console access and CLI.

**Environment:** Docker, Kubernetes, Maven, Jfrog, RHEL, Linux, AWS, AWS Cloud Formation Templates, AWS Cloud Watch, PowerShell, Tomcat, Bitbucket, Nginx, AWS Code Pipeline, AWS Code Deploy, Splunk

**Anthem**, **Indianapolis, IN June 2019 to December 2019**

**Role: DevOps Engineer Intern**

**Responsibilities:**

* Hands-on experience in Infrastructure Development and Operations. Designed and deployed applications using AWS services like EC2, EBS, S3, VPC, RDS, SES, ELB, Auto scaling, Cloud Front, Cloud Formation, Elastic Cache, Cloud Watch, SNS, and Route 53.
* Experienced in all phases of the software development life cycle (SDLC) with a specific focus on the build and release of quality software. Experienced in Waterfall, Agile/Scrum, Lean, and most recently Continuous Integration (CI) and Continuous Deployment (CD) practices.
* Designed and distributed data across all the nodes in a Cluster on different availability zones in AWS Redshift and experienced in automating the infrastructure using Terraform in the AWS console.
* Worked on Octopus deploy which is used to deploy applications securely to servers that are on-premises or in the cloud.
* Hands-on experience in GCP services like EC2, S3, ELB, RDS, SQS, EBS, VPC, EBS, AMI, SNS, RDS, EBS, Cloud Watch, Cloud Trail, Cloud Formation GCP Config, Autoscaling, Cloud Front, IAM, R53.
* Experienced in Gitlab CI and Jenkins for Continuous Integration CI and for End-to-End automation for all build and CD.
* Helped the higher management by developing Dashboards to understand more about the available data.
* Created and Extensively used Octopus deploy Automation for .Net application by setting a transformed variable to change Config files accordingly.
* Created feasible Splunk environmental usage by adding more search heads for multiple indexers.
* Set up 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.
* Worked on creating deployment scripts using PowerShell and automated multiple daily maintenance tasks using PowerShell.
* Worked Extensively on building and maintaining clusters managed by Kubernetes, Linux, Bash, GIT, and Docker, on GCP (Google Cloud Platform)
* Continuous integration with Jenkins. Continuously evaluate and recommend improvement to CI/CD processes.
* Expertise in using version control tools like Subversion (SVN), and GIT.
* Extensively worked on Jenkins for continuous integration and for End to End automation for all builds and deployments.
* Experience in setting up Baselines, Branching, Merging, and Automation Processes using Shell, Perl, Ruby, Python, and Bash Scripts
* Designed, implemented solutions for both public(AWS, GCP) and private(Open stack) cloud platforms.
* Experience in using Nexus Repository Manager for Maven builds.
* Worked on provisioning different environments using Chef, Puppet, and Ansible Configuration management tools.
* Experience in the deployment process of Octopus deployment including running a PowerShell script to stop an application server and back up a database, deploying an ASP.NET web application package, and updating IIS.
* Designed, built, and deployed a multitude of applications utilizing almost all the AWS (Including EC2, S3, and Elastic Beanstalk).
* Experience in migrating from Gitlab to docker and implementing Gitlab inside docker.
* Worked on creating deployment scripts using PowerShell and automated multiple daily maintenance tasks using PowerShell.
* Launched multi-node Kubernetes cluster in Google Kubernetes Engine(GKE) and migrated the dockerized application from AWS to GCP.
* Experience in software development, including languages, and frameworks such as Python.
* Implemented continuous integration build and deployments using Jenkins and Octopus Deployment.
* Extensively used Google stack driver for monitoring the logs of both GKE and GCP instances and configured alerts from Stack driver for some scenarios.
* Focusing on high availability, and fault tolerance using Auto Scaling with Cloud watch monitoring.
* Experienced in setting up databases in AWS using RDS, storage using S3 buckets and configuring instance backups to S3 buckets.

**Environment:** Jfrog, Gitlab, Linux, AWS, PowerShell, Tomcat, Jenkins, UDeploy, AppDynamics, Apigee, Windows Servers

**Lumen Technologies, Monroe, Louisiana January 2019 to May 2019**

**Role: DevOps/Build and Release Engineer Intern**

**Responsibilities:**

* Developed and implemented Software Release Management strategies for various applications according to the agile process.
* Installed, Configured, and Administered Jenkins Continuous Integration Tool.
* Developed build and deployment scripts using MAVEN as build tools in Jenkins to move from one environment to another environments.
* Branching, Merging, Tagging, and maintaining the version across environments using tools like GIT, and GitHub.
* Designed a small cluster of AWS environments for DEV and QA environments.
* Implemented AWS solutions using EC2, S3, RDS, EBS, Elastic Load Balancer, and Auto scaling groups.
* Performed Branching, Tagging, and Release Activities on Version Control Tools GIT.
* Used Elastic search to support real-time GET requests, which makes it suitable as a NoSQL datastore.
* Created deployment tickets using Jira for build deployment in Production.
* Used Puppet by creating DevOps processes for consistent and reliable deployment methodology.
* Configured Puppet to perform automated deployments. Expert in User Management and Plugin Management for Puppet.
* Installed and configured an automated tool Puppet that included the installation and configuration of the Puppet master, agent nodes and an admin control workstation.
* Used Maven as build tool on Java projects for the development of build artifacts on the source code.
* Used Ansible as an automation engine for cloud provisioning, configuration management, application deployment, intra service orchestration and multi-tier deployments.
* Created Ansible playbooks to install and setup Artifactory.
* Implemented Continuous Integration and Continuous Deployment using Jenkins, ANT, Maven, Nexus, Ansible.
* Maintained Apigee for building applications, providing security over cyber threats in giving better assistance to the developer teams. Finally, it supports the betterment of Microservices.
* Using Docker, Jenkins, VMWare, RHEL, Kubernetes, Artifactory, Ansible & GitLab.
* Created CI/CD pipeline in the Jenkins and ran the build by integrating with GitHub repository by using ansible build and deploy scripts. Stored the build Artifact to S3 bucket in AWS cloud.
* Experience with Docker and Vagrant for different infrastructure setup and testing of code.
* Installed Pivotal Cloud Foundry on EC2 to manage the containers created by PCF. Used Docker to virtualize deployment containers and push the code to EC2 cloud using PCF.

**Environment:** DevOps, Shell, Maven, Jenkins, Ansible, Python, Apigee, AWS, GIT, Apache Web Server, Tomcat, GitHub, Splunk, Prometheus, Grafana, Docker, Nexus Antifactory.