**MOHAMMED AZLAN IRSHAD**

**DevOps / Cloud Engineer**

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**Professional Summary:**

* 6+ years of IT Industry experience with emphasis in **DevOps methodologies** and focused on **Automation** of **Build/ Deployment/ Environment** Management areas by implementing **CI/CD pipelines** to help teams deliver a better and reliable software into production environments.
* Experience in merging, branching strategies, bug fixes and configuration of version control tools like **Subversion, GIT, Bit Bucket** and **Git Hub** for smooth release management into production environments.
* Extensively worked with **CI/CD** and configuration management tools like **Jenkins, Puppet,** and **Chef.**
* Expertise with build tools like **MAVEN** and **ANT** for the building of deployable artifacts such as jar, war and ear from source code and plugin management as per requirements.
* Integrated both **SAST** and **DAST** tools into CI/CD pipelines, providing continuous security testing and feedback loops for developers.
* Worked in using various artifact repository managers like **Nexus, Arti-factory,** and **Frogs** for **Maven** builds.
* In depth knowledge of Apache Cassandra architecture
* Well versed in scalable and highly available Domain Name System (DNS), to route traffic to **AWS** Cloud from users connected using **AWS** Direct Connect for larger deployments.
* Experience on Python Boto framework and CloudFormation to automate AWS environment creation along with the ability to deployment on **AWS**, using build scripts (**AWS CLI)** and automate solutions using Shell and Python.
* Knowledge on SaaS, PaaS and IaaS concepts of cloud computing architecture and Implementation using AWS, OpenStack, OpenShift, Pivotal Cloud Foundry (PCF) and Azure.
* Worked on Amazon Web Services (**AWS)** Cloud services like **EC2, S3, VPC, EBS, RDS, IAM, DMS,** Amazon Glacier, Route 53, Redshift, CloudWatch, SNS, SQS, Auto Scaling, CloudFormation, Lambda, API Gateway, Step Functions, IOT, Aurora, CloudTrail, Elastic Load Balancing.
* Worked with DevOps related automation tools which include, application configuration management (Ansible) and container management tools (**Docker, AWS ECS, CFT).**
* Had experience with **Kubernetes** for containerization management and **docker**
* Expertise in writing **CHEF recipes** in cookbooks to automate infrastructure as a code, worked on scheduling the Chef Nodes Convergence using Linux Cron Jobs.
* Worked on **Jenkins** and **Docke**r interactively and integrating together for end-to-end automation of builds and deployments.
* Engineer, design, test, implement changes/additions with the Enterprise Certificate Management.
* Extensively used **Golang** in writing microservices.
* Expertise in architecting and implementing **azure services**, such as network services like **Azure CDN, Express Route, Azure DNS, virtual network, traffic manager, load balancer, VPN Gateway**, storage services like **a data lake, blob storage, queue storage, file storage, table storage**.
* Experienced in Automating, Configuring, and deploying instances on AWS, Azure environments and Data centers, also familiar with EC2, Cloud watch, and managing security groups on **AWS.**
* Experience in migrating database using **AWS** Database Migration Service (DMS) homogenous migrations such as oracle to oracle heterogeneous migrations between different database platforms such as Oracle to Amazon Aurora and **Microsoft SQL to MySQL**
* Experience on Security Vulnerability tools like ASV scans , DAST and SAST tools
* Work experience on setting up end-to-end Pipelines in **Azure DevOps** using **YAML scripts** following Industrial standards.

**Technical Skills:**

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| **Languages** | **C, C++, .NET, XML, SHELL, PERL, Python, Ruby, PowerShell** |
| **Build/Release Tools** | Jenkins, Docker, AWS, Chef, puppet, Ant, Vagrant**,** Hudson, GitHub, Ansible, Open Stack and Salt Stack, Splunk, Zabbix, Nexus |
| **SCM Tools** | **Git, CVS, SVN, Perforce, TFS, ClearCase** |
| **Operating Systems** | UNIX, Linux - Red hat/Centos/ Ubuntu, HP-UX, Solaris, Microsoft Windows NT, MAC OS |
| **Database** | **MySQL, Oracle 9i/10g, SQL Server, SQL Mongo DB, Cassandra, DB2** |
| **Azure Services** | **Azure Lighthouse, Azure Defender, Azure Security center, Azure AD, Azure policies, Azure SQL, Azure storage** |
| **AWS Services** | EC-2, ELB, VPC, RDS, IAM, Cloud Formation, Glue, S3, Cloud Watch, Cloud trial, Cognito,s SNS, SQS, SWF, EBS, Amazon direct connect |
| **Web Servers** | Oracle Web logic server11g/10g /9, Apache, Tomcat, NGINX WebLogic 8.1/9.2, WebSphere, JBoss, Oracle ATG web commerce, IIS |
| **Scripting Languages** | UNIX Shell scripting, Bash, Perl scripting, PowerShell, Ruby scripts, python scripting |
| **Bug Tracking Tools** | JIRA, Backlog |
| **Cloud Technologies** | AWS, Azure |
| **Containerization Tools** | Docker, Kubernetes, AWS ECS |

**Professional Experience:**

**Client: Microsoft,** **Charlotte, NC Jan 2023 – Present**

**Role: AWS/Azure DevOps Engineer**

**Responsibilities:**

* Auto scaling of **Web Application** instances based on the Cloud watch alarms during sudden increase in network traffic.
* Designed and implemented Multicloud architectures leveraging both **AWS** and **Azure** cloud platforms to achieve high availability, scalability, and disaster recovery capabilities.
* Configured CI/CD pipelines with **Github Actions** to automatically build, test, and deploy code to Kubernetes clusters.
* Utilized Infrastructure as Code (IaC) tools such as **Terraform, AWS CloudFormation**, and Azure Resource Manager (ARM) templates to automate infrastructure deployment and configuration across multicloud(AWS & Azure) environments.
* Automate deployment using **Ansible** to provision amazon AWS Instances to enable continuous deployments.
* Configured monitoring and logging for AWS resources using **CloudWatch** and **S3** and set up alarms and notifications for critical events.
* Collaborated with development teams to streamline the release process and improve software quality using GitHub Actions and Git.
* Implemented CI/CD best practices for **SageMaker** projects, enabling automated testing, validation, and versioning of ML models.
* Using **Splunk** Dashboards to monitor the application logs
* Created AWS Kubernetes **Namespaces**, **Fargate** profiles and deployed the application.
* Optimized cloud resources on **AWS**, including EC2 instances, S3 buckets, RDS databases, and VPC configurations, to maximize performance and minimize costs
* Integrated SAST tools such as SonarQube & Checkmarx into CI/CD pipelines to identify security vulnerabilities in source code early in the development cycle.
* Configured AWS VPC, Private and public Subnets and deployed the application within the specified range.
* Worked on creating the Kubernetes Ingress which then provisions the Application Load Balancers to load balance the application.
* Configured **FluentBit** to stream logs from Applications in K8s and forward to CloudWatch using **ADOT Collector**
* Proficiency in scripting languages like **Python and Bash**.
* Established security policies and thresholds within **SAST** tools to enforce coding standards and prevent vulnerabilities from being introduced into the codebase.
* configure and integrate **Azure Aqua** with Azure services like Azure Container Registry, Azure Kubernetes Service (AKS), or Azure Container Instances.
* Experience with security best practices and AWS security services like **IAM** and **KMS**
* Proficient in Terraform to provision and manage infrastructure as code and manage state files in S3 for easy collaboration.
* Enabled continuous security testing by scheduling regular **DAST** scans as part of the deployment process, ensuring new releases are free from critical vulnerabilities.
* Experienced in setting up and configuring **DNS records** for domain names, such as A, CNAME, MX, and TXT records.
* Proficient in using AWS CloudWatch and **AWS CloudTrail** to monitor and log events and metrics related to infrastructure and applications running on AWS.
* Worked with networking teams in configuring **AWS** Direct Connect to establish dedicated connection to data centres.
* Worked with the team on **AWS** to **Azure** migration and gathered prerequisites from product managers of the required Machine Learning Applications that are expected to migrate to **Azure** for better IaaS and ensured that they meet the expectations of the client.
* Configured and managed cloud **networking components** such as VPCs, subnets, route tables, and **security groups** to ensure secure and isolated communication between resources.
* Building/Maintaining **Docker** container clusters managed by **Kubernetes** Windows, PowerShell, GIT, Docker, on **Azure Cloud**.
* Hands on experience on **Azure VPN-Point to Site, Virtual networks, Azure Custom security, end point security and firewall.**
* Shared relevant knowledge and insights with the team by sharing confluences to drive innovation, evaluate new tools and technologies, and improve **DevOps processes** and practices.

**Environment**: AWS (EC2, VPC, ELB, S3, RDS, EBS, ELB, IAM, SQS, RDS, CloudWatch, CloudFormation Templates), Linux, Bitbucket, AWS Glue, Athena, AWS CLI, AWS Auto Scaling, CDK, Jenkins, Unix/Linux, Shell scripting. DevOps, Tomcat, Apache, Jenkins 1.0.5, Python3.6.0, Ruby2.3 Chef12.7.2, JIRA 7.2.x, Maven 3.0.2, GITHUB 2.0, Azure(Kubernetes, Azure DevOps Pipelines, EventHubs, Resource Groups, Security)

**Client: Gainwell Technologies/ Flagstar , Irving, Texas Mar 2023 - Dec 2023**

**Role: AWS DevOps Engineer**

**Responsibilities:**

* Leveraged **AWS** glue to extract data from **MYSQL** and create tables in Athena to provide source data to Quick Sight Analytics.
* Implemented security controls, encryption, and compliance standards to protect data and applications on AWS, leveraging services like IAM, KMS, and AWS Config.
* Integrated **SageMaker** with existing DevOps tools and processes, ensuring seamless collaboration between developers, and operations teams.
* Consolidated monthly cloud expense reports, Weekly status report, Microsoft project plans for all the system builds on cloud platforms and generated dashboards using **AWS** Quick sight and tableau.
* Good knowledge of Operation Management Technologies - Log Aggregation, Server Monitoring, Process Monitoring, Application Monitoring - Splunk, Nagios, New Relic, Logstash, Kibana.
* Facilitated secure code reviews by leveraging **SAST** reports to identify and remediate vulnerabilities before code is merged into main branches.
* Worked on Configuration of Internal load balancer, load balanced sets and Azure Traffic manager.
* Implemented network monitoring, intrusion detection, and incident response procedures to detect and mitigate security threats in cloud environments.
* Generated comprehensive security reports from **SAST** tools for compliance with regulatory standards and internal security policies.
* Managed **SageMaker** infrastructure and resources using AWS CloudFormation templates, optimizing costs and resource utilization.
* Setup and maintained monitoring and alerting systems like AWS CloudWatch, Prometheus, or ELK stack to monitor system health, performance metrics, and application logs.
* Collaborated with development and operations teams to remediate vulnerabilities identified by **DAST** scans, ensuring secure application deployment.
* DevOps role converting existing **AWS** infrastructure to Server-less architecture **(AWS Lambda, Kinesis) deployed via terraform.**
* Worked on automating task-using Puppet. Application as wells as any upgrade to the nodes were push through Puppet and cloning it to GitHub.
* Setting GitHub repository and Runner for build automation, Installing, integrating and running Docker containers.
* Developed and implemented the **J2EE Micro services on AWS EKS using the Kubernetes, Docker CE and Jenkins CI pipeline.**
* Creation of gitlab-ci.yml file for kicking build process in stages that run in docker container.
* Wrote Chef Cookbooks for various DB configurations to modularize and optimize product configuration, converting production support scripts to Chef Recipes and AWS server provisioning using Chef Recipes.
* Configuring, automation and maintaining build and deployment **CI/CD** **tools GIT/GitLab, JENKINS, Build Forge, Docker registry/daemon, Nexus and JIRA** for Multi-Environment (Local/POC/NON-PROD/PROD) with high degrees of standardization for both infrastructure and application stack automation in **AWS** cloud platform. Orchestrating **CI/CD** processes**. CI/CD** tools dockerized and infrastructure setup in Vagrant, AWS, and VPCs.
* Installed and configure the GitLab runners to deploy the .NET components on to the IIS servers. Worked on the GIT branching strategy to deploy the components on to different environments.
* Worked on integrating **AWS DynamoDB** using **AWS** Lambda to store the values the items and backup the **DynamoDB streams.**

**Environment:** Azure, Azure Devops, Terraform, Jenkins, Docker, Kubernetes, Ansible, GitHub Enterprise, Maven, Splunk, PowerShell Scripting, windows Administration, JIRA, ServiceNow.

**Client: FedEx, Memphis, Tennessee Oct 2022 – Feb 2023**

**Role: AWS DevOps Cloud Engineer**

**Responsibilities:**

* Worked with the team on **AWS** to Azure migration and gathered prerequisites from product managers of the required Machine Learning Applications that are expected to migrate to **Azure** for better IaaS and ensured that they meet the expectations of the client.
* Implemented **AWS** Code Pipeline and created Cloud formation **JSON** templates in Terraform for (**IAC)** infrastructure as code.
* Strong experience in maintaining repositories in the Bitbucket for the services developed and set up automated testing and deployments using **Jenkins.**
* Expertise in integrating Terraform with Ansible, Packer to create and Version the **AWS** Infrastructure.
* Building/Maintaining **Docker** container clusters managed by **Kubernetes** Windows, PowerShell, GIT, Docker, on **Azure Cloud**.
* Used Jenkins pipelines to drive all microservices builds out to the Docker registry and then deployed to Kubernetes, created Pods, and managed using **Kubernetes.**
* Scheduled, deployed, and managed Container Replicas onto a node cluster using **Kubernetes.** Implemented Prometheus and Grafana for storing and visualizing the data.
* Worked with the team on **AWS** to Azure migration and gathered prerequisites from product managers of the required Machine Learning Applications that are expected to migrate to **Azure** for better IaaS and ensured that they meet the expectations of the client.
* Configured Azure Role-based Access Control (RBAC) to segregate duties within our team to grant minimum access to users to perform their jobs.
* Experience in creating a Log analytics workspace and enabling cluster addon. Leveraged and integrated it with Azure.
* Designed and implemented CI/CD pipelines using **AWS** CodePipeline, Jenkins, or GitLab CI to automate software delivery processes.
* Utilized Docker to containerize applications and services, deploying them on **AWS ECS** (Elastic Container Service) or EKS (Elastic Kubernetes Service) for container orchestration.
* Managed containerized workloads with **AWS Fargate**, ensuring scalability, resilience, and efficient resource utilization.
* Virtualized the servers using the **Docker**for the test environments and development environment and performed configuration automation using **Docker containers.**
* Created inventory, job templates and scheduling jobs using Ansible Tower. Downloaded and managed
* Wrote **UNIX** shell scripts to fetch, parse, and load data from external sources and used multithreading to improve performance in generating the reports in Java.
* Performance tuning and management for **Linux** server and working with the application/database team to resolve issues.

**Environment:** Azure, AWS, Bit Bucket, Jenkins, Gradle, Kubernetes, Docker, Terraform, Ansible, Dynatrace, shell Scripting, Linux.

**Client: Integrity Spirit, India June 2019 – July 2021**

**Role: AWS DevOps Engineer**

**Responsibilities:**

* Improving customer experience by **building, deploying, and scaling web services** on virtual infrastructure, swiftly investigating and resolving technical issues.
* Experienced in setting up the **AWS** infrastructure using the services like **EC2, VPC, IAM, RDS**, and Elastic Cache. Automating the regular tasks by using Python and Shell scripting.
* Working on implementing the security best practices in the **AWS cloud**
* Worked with Amazon Web services (AWS) and implemented solutions using **EC2, S3, and RDS in cloud formation JSON templates, EBS, Elastic Load Balancer, Auto Scaling Groups, Auto scaling Launch Configuration.**
* Lift and shift of an existing on-premises application **to AWS.**
* Extensively worked on the Bamboo and created, configured and maintained the Bamboo Projects, Plans, Stages, Jobs and Tasks. Implemented the setup for Master slave architecture and Nodes to improve the Performance of Jenkins.
* Good hands-on knowledge of Source Code Management (**Version Control System)** tools like **Git** and automated build and Deployment using Jenkins.
* Configured and maintained Jenkins to implement the **CI/CD** process and integrated the tool with **Git, Maven, Nexus, Docker, Nagios and Zira** for end-to-end automation and took the sole responsibility to maintain the **CI/CD** Jenkins server.
* Written **Chef Cookbooks** for various DB configurations to modularize and optimize product configuration, converting production support scripts to Chef Recipes and **AWS server** provisioning using Chef Recipes.
* Installed **Ansible** Registry for local upload and download of Docker images and even from **Docker hub**.
* Automate deployment using **Ansible** to provision amazon AWS Instances to enable continuous deployments.
* Created monitoring script in **python** for **AWS** infrastructure saving costs instead of using **CloudWatch.**
* Installed the application on **AWS EC2** **AMI** Instances and configured the storage on **S3** bucket.
* Hands on Experience with **ETL**tools such as AWS Glue, Using Data pipeline to move data to **AWS RedShift.**
* Experienced in working with **AWS IAM** to create new accounts, roles, and groups.
* Worked on **MAVEN** build tool and wrote pom.xml files packaging and deploying on different artifacts like java web archive, enterprise archive, web archive. Developed and automated build scripts and deployed using **MAVEN** as build tool in Jenkins to move from one environment to other environments.
* Worked on Version control setup **GIT** and integration tool Jenkins. Installed, Configured and Administered Jenkins Continuous Integration Tool.
* Experience in designing and implementing continuous integration system **using Bamboo** by creating **Python and Perl scripts.**

**Environment:** AWS, Bamboo, Git, Python Scripting, Ant, Linux, Jenkins, Maven, Git, CI/CD

**Client: Scape Solutions, India Jun 2018 – May 2019**

**Role: Linux Administrator**

**Responsibilities:**

* Installation and administration of RHEL 4.0/5.0 and SUSE 10.x.
* Wrote **UNIX shell** scripts for automated installations, to extract **logs using C, Bash, Perl**.
* Developed automated processes that run daily to check disk usage and perform cleanup of file systems on **LINUX** environments using shell scripting.
* Participated in **Java/J2EE** and have the ability to develop **XML, HTML, Shell Scripts.**
* Supported infrastructure environment comprising of **RHEL and Solaris.**
* Involved in Linux backup/restore with tar including formatting and disk partitioning.
* Administration of Red Hat Enterprise Linux 5.x/6.x and CentOS includes installation, testing, tuning, upgrading, patching, and troubleshooting day-to-day issues.
* Performed system Firmware updates, **Linux kernel**, memory upgrades and along with red hats Linux Kickstart Installation.
* Involved in development, user acceptance, and performance testing, production & disaster recovery server.
* Responsible for setting up Cron jobs scripts on production servers.
* Perform new builds and decommissions of both physical and VMware servers.
* Deployed the Java applications into web application servers like Web logic. Responsible for configuring real time backup of web servers.
* Deployed Enterprise Application Archive **(EAR), Web Application Archive (WAR), and Staging production environments.**
* Created and modified users and groups with **SUDO** permission.
* Applied appropriate support **packages/patches** to maintain system integrity.
* Managing the groups and user in Active Directory, installing and configuring send mail and adding servers to domain.

**Environment**: Red Hat Linux (RHEL 4/5), UNIX, Logical Volume Manager, Red Hat Cluster Servers, Oracle, MySQL, Shell scripts, Apache Tomcat, SAN, SUSE.

**Education**

Campbellsville University- Master's degree, Computer Science, Aug 2021 - Dec 2022