

Muneeb Uddin Ahmed

Karachi, Pakistan

Email: muneebuddinahmed97@gmail.com

Ph: 03353578675

Summary

highly motivated results-driven & versatile Multi-Cloud & DevOps Engineer with over 2.5 years of experience in designing, deploying, and managing scalable, high-availability infrastructures across AWS, Azure, and Google Cloud. Expertise in optimizing CI/CD pipelines, containerization, Infrastructure as Code (IaC), and automation tools. Skilled in monitoring, troubleshooting, and enhancing cloud environments for performance, cost-efficiency, and scalability. Proficient in leveraging modern DevOps practices to deliver secure, reliable, and innovative solutions. A collaborative team player with strong communication skills, committed to continuous learning and driving excellence in cloud infrastructure.

Technical Skills & Strengths

Amazon Web Services (AWS)

- IAM
- S3
- CloudFront
- CloudTrail
- CloudWatch
- VPC
- Lambda & Eventbridge
- EC2
- Elastic Load Balancing
- EC2 Autoscaling
- Route 53
- Systems Manager
- SNS
- SQS
- DynamoDB
- RDS
- Elastic Beanstalk
- CI / CD
- CloudFormation
- Command Line Interface
- Datasync
- Lightsail
- Managed Active Directory
- Amazon Workspaces

Microsoft Azure

- Azure VNet
- Azure Virtual Machines
- Azure SQL
- Azure SQL Managed Instance
- Azure ACR
- Azure DevOps (Basics)
- Azure App Service
- Azure AKS

Google Cloud Platform (GCP)

- Google Cloud VPC
- Google Compute Engine
- Cloud SQL
- Cloud Build
- Artifact Registry
- Google Kubernetes Engine
- Google Cloud Shell

DevOps

- Linux
- Github & Github Actions,
- BitBucket, GitLab)
- Jenkins
- Ansible
- Terraform
- DataDog
- Docker
- Kubernetes
- Helm
- ArgoCD
- ELK Stack
- Prometheus & Grafana
- SonarQube

Experience:

DevOps Engineer

Matrix Systems Pvt. Ltd Oct 2023 – Dec 2024

- Working closely with development teams to integrate DevOps practices and offering guidance on automation, deployment strategies, and best practices.
- Designed and implemented Kubernetes deployments using Helm charts on Azure Kubernetes Service (AKS), ensuring scalable and efficient application management.
- Leveraged Jenkins as a CI/CD tool to automate backend build processes, optimizing development workflows and reducing manual intervention.
- Developed and maintained GitHub Actions workflows, including custom email templates, and configured self-hosted runners (Windows and Linux) for multiple repositories.
- Built CI/CD pipelines for containerized applications, including Docker image builds, pushes to AWS ECR, and deployments to AWS ECS using input parameters.
- Conducted performance testing on Azure-managed SQL instances by simulating varying workloads from Kubernetes pods, ensuring database reliability under stress.
- Set up and managed a Kubeadm-based Kubernetes cluster in a local environment, showcasing hands-on expertise in container orchestration.

- Delivered internal training sessions on GitHub and AWS, enhancing team proficiency in version control, CI/CD, and cloud infrastructure.
- Implemented a Proof of Concept (PoC) to integrate GitHub with Jira, enabling automated branch creation from Jira issue names and IDs for defects found by QA Team.

Cloud Support Engineer

Sherdil Cloud Jun 2022 – Present

- Proficient in designing and deploying scalable, secure, and resilient cloud infrastructures using AWS and GCP technologies.
- Experienced in managing and resolving cloud infrastructure-related issues, ensuring optimal performance and reliability.
- Skilled in building and configuring cloud infrastructure from scratch, adhering to industry best practices and cloud provider recommendations.
- Provide end-to-end support for cloud-based solutions, including deployment, monitoring, troubleshooting, and optimization, ensuring high availability and alignment with business goals.
- Design and implement cloud infrastructure architectures tailored to client needs, focusing on high availability, durability, and scalability.
- Experienced in application deployment using tools like AWS Elastic Beanstalk, Docker, Kubernetes, and infrastructure-as-code (IaC) solutions such as Terraform and CloudFormation.
- Proficient in provisioning and managing cloud infrastructure using Terraform and automating deployments with Ansible.
- Configured and managed Desktop Cloud services, leveraging AWS Managed Microsoft AD and Amazon WorkSpaces for secure and scalable virtual desktop solution.

Education



NED University of Engineering and Technology
MS in Information Security (Weekend)
Mar 2023 - Dec 2024



University of Karachi
Bachelors of Science in Computer Science
Jan 2017 – Dec 2020

Projects

Security Loopholes Findings:

Created a security sheet and identified security loopholes in AWS Cloud using Security Hub and Trusted Advisors. Suggested best practices for security and cost optimization.

Applying Security Best Practices:

Checked compliance using Audit Manager and Security Hub to analyze infrastructure security, identifying and applying best practices to ensure infrastructure security.

Local Startup Client Web Application Deployment using AWS

Elastic Beanstalk:

First, Set up and implement front-end (React) and back-end (PHP Laravel) applications using a dockerized environment with AWS Elastic Beanstalk.

Then Created Docker files for React and Node.js to deploy the front-end and back-end applications on AWS Elastic Beanstalk.

Jenkins Integration with SonarQube:

Configure Jenkins with SonarQube to scan vulnerabilities in builds and source code.

Configured Build Pipeline using GitHub Actions:

Configured a pipeline to build Java-based build files (.jar and .war) and tagged builds with releases using GitHub Actions.

App Deployment on AWS EKS:

Deployed an application on AWS EKS using a custom-built image pushed to a Docker Hub private repository, along with Kubernetes objects like Pods, Deployments, and Services.

Integration of GitHub CI/CD with S3 Bucket:

Configured integration of an S3 Bucket with GitHub for deploying websites using GitHub Actions. The workflow pulled code and copied it to the S3 Bucket, making the updated static website accessible via a static URL.

Cross-Account Migration of S3 from EFS using Datasync:

Configured Datasync tasks on two AWS accounts (source and destination) to replicate data stored in S3 from EFS. Configured IAM and S3 bucket policies for the task.

AKS Tomcat Deployment via Helm Charts:

Deployed a Tomcat application on AKS using Helm charts through an Azure DevOps repository.

S3 Mount on WHM CPanel Linux Server:

Configured an S3 Bucket as a volume directory on a WHM server using the S3FS package manager to store the data files into cPanel WHM directory in which data will also be shown in the S3.

ArgoCD Configuration & Deployment on AWS EKS:

Successfully configured and installed ArgoCD in a Kubernetes environment using namespaces, deployments, and services (AWS Load Balancer).

Kubeadm Kubernetes Cluster Configuration:

Installed and configured a Kubeadm Kubernetes cluster on 3 nodes (1 master and 2 worker nodes) in a VirtualBox Linux environment, using Calico as a CNI for pod-to-pod communication.

Infrastructure Provisioning using IaC Tools (CloudFormation & Terraform):

Provisioned highly available infrastructure on AWS using CloudFormation and Terraform, including VPCs, EC2 with auto-scaling, and load balancing.

Kubernetes Cluster Setup on AWS EC2 using Kubeadm:

Configured a Kubernetes cluster on AWS EC2 using Kubeadm, including a single master node and multiple worker nodes, with Calico as a CNI.

Continuous Deployment with ArgoCD and Kubernetes:

Integrated a private GitHub repository with Kubernetes manifest files to enable continuous deployment of containerized apps using ArgoCD. Automated the deployment pipeline for smooth updates and rollbacks.

Automated Infrastructure Deployment and Application Setup:

Designed and implemented a fully automated infrastructure deployment pipeline using Terraform to provision EC2 instances and Ansible for application deployment.

AWS EC2 & RDS Migration with High Availability VPC

Configuration:

Migrated an EC2 instance and RDS database to another AWS account, restoring them to their original state. Designed a custom VPC with public/private subnets, route tables, NAT Gateways, and secure configurations for high availability.

GitHub - Jira Integration:

Led a Proof of Concept to integrate GitHub with Jira, enabling automated branch creation from Jira issues. It is useful when getting a defects from testing team on current build release so will be useful to create branch ticket issue to resolve the build defects.

Tomcat .war File Deployment Automation:

Developed a script to automate the deployment and configuration of .war files on Tomcat servers, including fetching the latest tags from SVN and updating configurations.

AWS ECR and ECS Deployment Pipelines:

Developed CI/CD pipelines to build Docker images, push them to AWS ECR, and deploy applications to AWS ECS using input parameters.

Azure SQL Performance Testing:

Conducted stress and load testing on Azure-managed SQL instances by generating workloads from Kubernetes pods.

Nginx Load Balancer Configuration:

Implemented an Nginx-based load balancer on local servers to optimize application traffic distribution.

GitHub Actions Workflows and Self-Hosted Runners

Configurations:

Created custom GitHub Actions workflows, including email templates, and configured self-hosted runners for multiple repositories.

AWS VPC Peering:

Set up AWS VPC peering for communicating different VPCs to provide clients access to private machines via a single jump server(Bastion Host) in a single account.

Design and Implementation of a Secure, High-Availability AWS Infrastructure with Managed Microsoft AD and Workspace Management:

Designed and deployed a highly available AWS infrastructure, including VPC, NAT Gateway, Internet Gateway, subnets, and route tables.

Implemented a Managed Microsoft AD directory service and configured AWS Windows Workspaces. Integrated TNTDrive to map S3 bucket folders/subfolders with IAM policy-based restrictions.

Enhanced security using Active Directory Group Policy Objects (GPOs) to enforce policies such as software installation denial, website restrictions for uploads/downloads, TNTDrive configuration control, and attachment blocking, ensuring a secure and compliant environment.