



NIZAMUDDIN MOHAMMED

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Summary

Certified AWS Solution Architect with Over 14+ years of experience in IT services and over 8+ years of experience in cloud architecture and implementation. With proficiency in configuring Continuous Integration (CI) and Continuous Delivery (CD) using Code Pipeline and Code Deploy for automation in the building and deploying process for operational success. Experience in cloud engineering, security and creating a fault tolerant, highly available architecture aimed towards the achievement of an enterprise goal. An outstanding performer in migrating and implementing applications and database from on premise to cloud. Great team player, excellent in communication, analytical and problem solving skills with the ability to work independently

Skill Set

- **Cloud Orchestration and Automation:** AWS Lambda, AWS Cloud Formation, Auto Scaling, AWS System Manager, Cost Optimization, Ansible, etc
- **AWS Security:** AWS Inspector, AWS Security Hub, Amazon Guard Duty, AWS Firewall Manager, AWS Direct Connect, AWS WAF etc
- **Application Delivery:** AWS Code Pipeline, AWS Code Commit, Jenkins, Github, Gitlab
- **Network:** VPC, VGW, NGW, TGW, CGW, DGW
- **Programming Languages:** Python, JSON, YAML, Bash
- **Data Protection:** AWS Certificate manager, AWS KMS, AWS Cloud HSM
- **Identity & Access Management:** AWS Organization, AWS IAM, AWS AD Connector, Active Directory, AWS Secret Manager AWS Workspaces
- **Governance and Compliance:** AWS Organization, AWS Control Tower, AWS Trusted Advisor, AWS Config, AWS Artifacts, etc
- **Amazon Web Service:** Auto Scaling, Life cycle Hooks, Cloud Formation, Cloud Watch, IAM, AMI, EC2, EBS, ELB, S3, IAM, VPC, VPC Peering, AWS Direct Connect Transit Gateway, IGW, SQS, SNS, Route53, Service Catalog, API Gateway, Cognito, AWS Connect etc
- **Data Repository:** S3 Data Lakes, AWS Redshift
- **Big Data/Hadoop/HDFS:** AWS EMR, Apache, Spark, Kafka
- **DevOps:** Terraform, Docker, Kubernetes, Code as Infrastructure

Certification

- AWS Certified Solutions Architect [BRZJQDHL1E41758]

EDUCATION

- Walden University: Master in Computer science 2013
- Osmania University: Bachelors in Computer science 2007

Project Experience

Sr.Enterprise Cloud Architect, AI Security

International Inc (navistar Inc)

June 2025 – Present

- Led DevOps initiatives for over 10 years, managing build, deployment, and operations for enterprise-scale applications, resulting in 30% faster release cycles and improved system reliability.
- Engineered automated deployment pipelines in high-traffic production environments, handling both Windows and Linux servers, reducing downtime by 40% through proactive troubleshooting and optimization.



- Implemented Agile/Scrum methodologies across cross-functional teams, integrating Continuous Integration and Continuous Delivery tools to streamline development workflows and enhance collaboration.
- ☑ Developed custom automation scripts using terraform and Python for infrastructure provisioning and application deployments, automating repetitive tasks and achieving 50% efficiency gains.
- Designed and deployed containerized applications using Docker and Kubernetes, scaling microservices architectures to handle peak loads while maintaining high availability and disaster recovery protocols.
- Configuration Management tools such as Ansible and Puppet, orchestrating server configurations for 100+ nodes in distributed environments to ensure consistency and compliance.
- Applied microservices design patterns and best practices, focusing on automation, resiliency, and scalability, which supported a 99.99% uptime for mission-critical systems.
- Optimized networking infrastructure, including load balancing, caching mechanisms, security protocols, configuration management, and certificate handling, to secure and accelerate application performance.
- Integrated Consul for service discovery and NGINX for reverse proxy and load balancing in production setups, improving service reliability and reducing latency by 25%.
- Utilized Redis for caching and session management in high-performance applications, enhancing data retrieval speeds and supporting real-time features in enterprise systems.

Fortra - Florida

July 2023 - Present

AWS Solution Architect

- Configured Gitlab CI/CD Pipeline using Jenkins connected to build environments (Dev, Stage & Prod)
- Implemented Cloudtrail in the organization to track the detailed logs and archiving solution for the logs for auditing purpose
- Implemented and manage Active Directory Federation Services(ADFS) in the cloud, ensuring secure access and identity management
- Implement and manage Active Directory (AD) services
- Implement IAM Access Analyzer towards the organization to track the un-used access and external access towards the account
- Using cloud security tools such Firewall manager, AWS Security Hub, AWS Config and other tool to make sure we stay compliant and increase our secure score
- Created Cloudformation templates for different environments (Dev/Stage/Prod) to automate infrastructure
- Created ECS cluster using Gitlab CICD Pipeline using Jenkins
- Created on tables on S3 bucket to process the files using AWS Glue and athena for quering
- Used AWS Glue for ETL jobs such as data transformation, validation and data cleansing



- Used cloudwatch for monitoring AWS resources and applications that deployed on AWS by creating new alarm, enable notification services and cloud watch log group.
- Creation of new AWS users in the Organization
- Migration of AWS users from other Organization
- Implemented Bedrock with generative AI for Applications
- Text Summarization for Industry using API Gateway, S3 and Cohere Foundation Model
- Employee HR Q & A App with Retrieval Augmented Generation (RAG) - Bedrock - Claude Foundation Model + Langchain + FAISS + Streamlit
- Build a Retail Banking chat bot Agent using Amazon Bedrock Agents & Knowledge Bases
- Expertise in automating builds and deployment process using bash and python for CI/CD on cloud
- Developed and executed Python scripting in projects for automation of repeated tasks.
- Implemented life cycle rule for archiving the data in S3 bucket
- Implemented life cycle rule for deleting the data in Glacier archival mode.
- Providing AWS users with appropriate permissions via roles and policies
- Implemented AWS tags based on the account's to track the expense per account
- Implemented SCP's towards the account

Prudential Financial - Florida

June 2022 - June 2023

AWS Solution Architect

- Configured CI/CD Pipeline using Jenkins connected to Bit Bucket to build environments (Dev, Stage & Prod)
- Techno functional subject matter expert for agile product micro services development towards "AWS Digital Transformation" initiative using AWS tools and services such as Angular Container, S3, Cloud Front, API Gateway, ECS fargate, Load balancer and VPC
- Defined AngularJS search interfaces which will get the data from Restful Web services and integration with AEM from Legacy systems.
- Experience with container-based deployments using Docker, working with Docker images, Docker hub, Docker registries, installation and configuring Kubernetes and clustering them
- Use of Docker and ECS to manage micro services for development of continuous integration and continuous delivery
- Automated cloud deployments using python bit bucket repositories and cloud formations .
- Deployed cloudfront to deliver content allowing reduction of load on the servers
- Configured the Dynatrace one agent into the cluster for monitoring traffic to load balancer
- Created Splunk dashboard and event logs for analyzing and monitoring

Dish Network - Denver, Colorado

July 2021 - June 2022

AWS Solution Architect

- Implemented applications in java framework using Spring Boot
- Manage Java applications landscape within the company domain
- Implemented scalable deployment strategies through automation/ orchestration (Cloud Formation, Auto scaling, Ansible, docker and EKS/ Kubernetes) containerization in AWS settings with the goals of applying DevOps methodologies to scientific computing

Automated cloud deployments using chef, python and cloud formations

- Implemented VPC Peering, Site-to-site VPN, Transit gateway, Internet gateway, NAT Gateways and VPC endpoints
- Configured network firewall such as security groups and NACL based on the business use case
- Migrating SQL Servers databases from On-premise to AWS
- Experience on AWS and Kubernetes based container deployments to create self-environments for dev teams and containerization of environments delivery for releases
- Container management using Docker by writing Docker files and set up the automated build on Docker HUB - Artifactory and installed and configured Kubernetes
- Use of Docker and Kubernetes to manage micro services for development of continuous integration and continuous delivery
- Leveraged AWS Control Tower to setup and governed a secure, multi-account AWS environment
- Implemented AWS Guard rails and SCP's for securing the AWS Organizations
- Deployed Guard Duty across Control Tower managed organization
- Provisioning of infrastructure via service catalog automation
- Provisioning of AWS users via custom tool automation via gitlab runner
- Kubernetes version upgrade from 1.19 to 1.21

Home Trust Company - Houston, Texas

June 2020 – July 2021

AWS Solution Architect

- Engaged with customers to understand their perspective business needs to migrate to AWS cloud
- Provided high level documentation with diagrams and led technical review designs to ensure adherence to standards and strategic direction
- Gathered requirements and provided strategies for a seamless migration of applications, web servers, and data from local server based systems to AWS cloud
- Experience in the assessment, discovery and planning of migrating database from on premise to cloud
- Presented architecture designs to businesses based on performance analysis to assure continuous improvement
- Migrating the data from on-premise to cloud (Oracle to Redshift) using AWS Direct connect, Data Migration Services (DMS) and schema conversion tool, S3 bucket to Redshift
- Accessing data from Redshift based on AWS Lambda function(Serverless/Micro services) using API Gateway with the help of query code to fetch data
- Deployed Nodejs Application using Elastic beanstalk using Code pipeline and code build
- Querying data using S3 data lake with AWS Athena using data glue catalog
- Creation and managing of VPC Clusters and peering them to different VPC as per requirement
- Designed highly available, cost-effective systems using EC2 instances, Auto Scaling and Elastic load Balancing
- Create architecture front end development using AWS tools and services such as RDS , S3, AWS Glue, Lambda Functions, Apache Spark, API Gateway, Data lakes, EC2, CloudFront,



Restful API, ECS, EKS, SES, VPC, IGW, AWS EMR and Control Tower Automate ongoing policy management

- Developed baseline and custom guardrails, policies, centralized policy enforcement, tagging policies in a well architected multi account environment
- Optimized cost through a mix of Reserved, Spot and On-Demand Instances, EC2 instance types, Auto scaling and S3 storage classes
- Implemented Control Tower Preventive and Detective guardrails and leveraged Account Factory using Lambda for new AWS account creation setup.
- Analyzed and made recommendations in areas of costs optimization, performance, security.
- Setup and configured logs files for detail monitoring and alerts notification for any updates.
- Implemented preventive and detective guardrails using Service Control Policies (SCPs) and AWS Config
- Implemented AWS best practices according to the industry standards

Tata Consultancy Services(TCS) US

Harris Bank/ Bank of Montreal

AWS Architect Chicago, Illinois

June 2018 – Apr 2020

- Setup AWS Single sign on (SSO) for on premise Active Directory (AD)
- Managed provisioning of AWS infrastructure using CloudFormation
- Deployed databases in Private Subnets and configured Bastion hosts and NAT-Gateways for access
- Configured several Life-cycle policies for managing data S3
- Implemented Network firewall using NACL, Security groups, Private-Subnets
- Configuring and troubleshooting DNS working with Route 53.
- Implemented Control Tower Preventive and Detective guardrails and leveraged Account Factory using Lambda for new AWS account creation setup.
- Experienced in scheduling AWS Lambda functions from CloudWatch triggers.
- Built and deployed multiple applications utilizing Amazon S3, RDS, IAM, DynamoDB, SNS and SQS, focusing on Auto Scaling, fault tolerant and high availability.
- Create architecture front end development using AWS tools and services such as Angular, Typescript, Restful API, S3, EC2, Cognito, Cloud Front, API Gateway, RDS, Redshift, ECS, EKS, SES, Lambda Functions, VPC and IGW
- Create AWS Lambda functions in Node.js and call them from JavaScript running in a web browser
- Use Node.js scripts to create the resources needed by the Lambda function
- Deployed and configured infrastructure using Ansible and Terraform.
- Task automation, service management and application deployment using Ansible and Jenkins.

IBM Canada - Suncor Energy

AWS Engineer

Toronto, ON

May 2016 - Apr 2018

- Architect high availability environment with auto scaling & Elastic Load Balancer.
- Migration of high availability web servers and databases to AWS EC2 and RDS with minimum or no downtime.



- Built VPC with private and public subnets and established a VPN setup for connection to on premise datacenter.
- VPC peering with other Accounts allowing access and routing to service and users of separate account to communicate.
- SSL setup for Apache and Nginx application couple with AWS ELB SSL for all http to https thereby maximizing security.
- Maintained network, CPU and established connectivity monitoring with CloudWatch and setup trigger alarm to notify system administrators.
- Security groups configured and locked down to the various authorized subnet and IP addresses in AWS.
- Automated deployment, configuration and security settings using Ansible.

IBM Canada - Loblaws

AWS Engineer

Toronto, ON

July 2013 - Apr 2016

- Lead the planning and design of public cloud-based architectures, solutions, configurations, and migrations.
- Implemented the Enterprise Information Security Architecture utilizing various security tools / frameworks.
- Performed detailed analysis of business problems and technical environments and use this in designing the solution
- Performed several Infrastructure, Web Application and Database Vulnerability Assessments
- Performed Code Reviews to determine security holes and to ensure code is written securely to prevent various web attacks such as Cross Site Scripting, SQL Injection, MITM attacks etc.

IBM India(Offshore) - Loblaws

July 2010 - Jun 2013

Client: Loblaws co ltd

Role: SAP Basis/Integration Consultant

- Analyzing SAP Performance Results using Standard & Customized reports and methods
- Identified Performance bottlenecks in Production System by performing analysis on CPU/Memory Utilization on Production Servers
- Presenting results in client meeting to grow business with clients
- Extensively worked with development team for various internal and application core errors identified in Performance testing
- Worked with SAP Max Attention Teams in scheduling and collecting the Trace for SAP Track 5 Objects to improve the SAP objects performance
- SAP Interfaces Between SAP – Non SAP systems

Wipro Ltd(Mar 2008 – June 2010)

Client 1: Aditya Birla Group, Mumbai

Role: SAP Basis/Integration Consultant

- Administered Database servers like Oracle including database back up scheduling (offline, online), maintaining table spaces, tuning performance variables,
- Security administration like; creating users, creating roles, assigning profiles, assigning roles, assigning authorization objects to roles across landscape
- Applying SNOTE in Development systems