Junaid Khan

Cloud Solutions Architect/Advocate



Highly energetic Solutions Architect with wide range of experience in design, development, and cloud implementation using public or hybrid cloud. Outstanding performer with passion for creating impact & making difference.

SUMMARY:

Email: jskhan84@hotmail.com

Cell: 862-325-0850

- Over 14+ years of professional experience in software industry comprising of design, development, deployment, and cloud implementation with thorough knowledge in AWS (Amazon Web Services)/Azure, Hybrid Cloud, VMware virtualization, and related technologies.
- AWS Certified Solutions Architect who is highly skilled in Cloud Engineering, DevOps & Cloud Security with proven success in automating & deploying solutions that are highly scalable & fault tolerant.
- Played vital role in performed cloud migration assessments, strategies defining delivery architecture, Inventory management, planning & prioritization to minimize project risk & complete data center migration before contract renewal.
- Introduced a factory approach to working to prevent stoppages. Adopted a sprint-based agile methodology that gave the business owners flexibility to reprioritize workloads as needed every week. Although speed was the top concern, we were able to reduce the cost of the project by accessing credits and discounts, including AWS services allowance.
- Successfully moved 90% of the workloads (~600 VMWare hosting ~1100 applications) to AWS cloud within just five months, allowing the company to give up its managed data center contracts and save money by 50%.
- Experience in defining IT RoadMap, Cloud Migration & Application Architecture Strategy.
- Performed key role in designing & implementation of various security controls which were essential for business-critical
 compliance & regulatory requirements (i.e., Payment Card Industry (PCI), SOC2, HIPPA). It helped business to be complaint all
 the time & successfully pass third party audits without any major findings which eventually resulted in more customer
 confidence & business.
- Designed & rolled out a solution that consolidated ~1500 repos, 2000 build & release pipelines from 200 Azure DevOps projects to 10 SOC controlled projects that made rollout easier & sustainable.
- Enforced governance & best practices by creating service catalog for cloud services, enforcing security standards, least
 privilege access across the board, storing data securely.
- Good knowledge & hands experience on capacity planning, load testing, monitoring & metrics-based auto scaling.
- Proficient in implementing & securing Cloud Solutions using various cloud services. Hands on experience in implementing
 Cloud native serverless as well as legacy server-based solutions.
- Built reusable CI/CD pipeline components to hide deployment complexities & setup common standards across organization
 which resulted in 95% grow of error-free dev-to-prod code delivery. Complete elimination of manual deployment practice.
- Proficient in Infrastructure orchestration & automation using CloudFormation, Terraform, Ansible, Shell/Bash script & PowerShell.
- Expertise in handling complex maintenance and administration tasks by leveraging appropriate services and writing custom
 solutions for automation. Ex. Implemented custom solutions to auto join EC2 instance upon launch in corporate active
 directory & unjoin them upon termination. This AD integration allowed us to centrally control access as well rollout various
 security features & software.
- Worked extensively on multiple security initiatives like Intrusion detection, endpoint monitoring, DDoS protection, hardening Linux and windows platforms to comply various regulatory requirements like HIPPA, PCI, SoC, etc.
- Good knowledge around network protocols (like TCP/IP, UDP, DNS, SMTP, FTP) & OS patching.
- Worked on numerous projects across IT industries and possess strong skills in application enhancements, performance tuning and production support. ability to analyze the results of monitoring systems to identify problem areas.
- Highly motivated self-learner with ability to develop proficiency and adapt to new technologies in a short period of time.
- Implementation and documentation of best practices; assessment of new tools and technologies.

TECHNICAL SKILLS:

<u>Cloud Services:</u> VPC | EC2 | S3 | RDS | Lambda | Route53 | SNS | SQS | API Gateway | Cognito | ECS | EKS | Elastic Beanstalk | IAM | CloudFront | Cloud Watch | Cloud Trail | Cloud Formation | Migration Hub | Server Migration Service (SMS) | Data Migration Service (DMS) | Code Build | Code Deploy | Code Pipeline | Redshift | EMR | Service Catalog | AWS Inspector | Macie

<u>Languages/Scripts:</u> Python | NodeJS | C# | Dotnet Core | PHP | jQuery | HTML5 | CSS | Angular | React | Bash | PowerShell <u>Application Servers:</u> MS IIS | Apache Tomcat | NGINX | etc.

<u>Databases:</u> MS SQL Server | Postgres | AWS Aurora | DynamoDB | MySQL | Oracle |

<u>Orchestration & DevOps</u>: Azure DevOps | Bamboo | Terraform | Ansible | Chef | Cloudformation | CodeBuild | CodeDeploy | CodePipeline | Jenkins | SonarCube | Visual studio | VSCode | Eclipse | MS Visio

Logs & Monitoring Tools: CloudWatch | Solarwind | Grafana | Prometheus | Elastic Search Kibana | Fiddler | Postman

EDUCATION:

Bachelor of Engineering - Electronics

Nagpur University, India

Post Graduate Diploma in Advance Computing

Center for diploma in advance computing, India

CERTIFICATION:

- AWS Certified Solutions Architect Professional
- AWS Certified Solutions Architect Associates
- · AWS Certified SysOps Admin
- · Architecting Microsoft Azure Solutions
- Configuring Microsoft Azure Solutions

EXPERIENCE:

SOC & PCI CONTROLS ROLLOUT (02/2022 - PRESENT) - CONNECTIVERX, NJ

Position: Cloud Lead/DevSecOps Engineer

- As a Project Lead initiated & formulated various governance/controls strategy around various security initiatives like SOC/CSI benchmark/PCI compliance for upcoming audit & migration project.
- Collaborated with stake holders & defined unified release management process (with appropriate security controls) using CI/CD pipelines to improve overall efficiency & delivery time.
- Build a solution that consolidates ~1500 repos from 120 Azure DevOps projects to 10 projects that made rollout easier & sustainable.
- Wrote a complex automation utility that helped in rolling out SOC controls across ~1500 repositories, 2000 build & release pipelines.
- Using AWS Config & Systems Manager, rolled out many security controls & remediation actions like restrict public access to S3 buckets, Encryption, WAF on ALBs, TLS version upgrade, etc.
- Simplified complex maintenance and administration tasks (Like Patching, Compliance & etc.) by leveraging suitable services and writing custom solutions for automation.
- Designed and developed innovative compliance dashboard for leadership which provides detailed compliance status real-time.
- Maintained and enforced AWS best practices for AWS IAM user, roles, and policies.
- Used AWS inspector to scan EC2 instances against PCI/CSI benchmark & created hardened AMIs (Linux/Windows) to use in applications.

Services/Tools: AWS EC2, ASG, ALB, WAF, AWS SSM, AWS Config, Lambda, SSM, AWS Inspector, S3, Code Deploy, CloudFormation, Azure DevOps, Nodejs, Dotnet Core, Python, Bitdefender, NxLog, Rapid7, CloudWatch metrics, events.

BUY AND BILL REPLATFORM (05/2021 - 01/2022) - CONNECTIVERX, NJ

- Reverse-Engineered multiple legacy HCP/Sales/Admin portals & redesigned them on configuration driven multi-tenant application which eventually reduced server footprint & operational overhead by 40%.
- Fully automated infrastructure and cloud provisioning for refactoring of high-volume web application which resulted in 4x cost reduction spent on hosting.
- Built reusable CI/CD pipeline components to hide deployment complexities & setup common standards across organization which resulted in 95% grow of error-free dev-to-prod code delivery. Complete elimination of manual deployment practice.
- · Designed cloud native (serverless) event driven solutions which made integrations between various system easier & smooth.
- Improved product aesthetic and UX of the customers-facing portal, resulting in 80% increase in users' retention and 25% increase in conversion.
- Expertise in building loosely coupled, micro-service based & server-less architecture-based solutions using AWS/Microsoft infrastructure & services
- Performed through analysis of wrapper legacy code & optimized DB queries for performance improvement which fixed frequent 504 timeout issues which was major pain point for customers & sales representatives.

Services/Tools: AWS EC2, ASG, ALB, WAF, AWS SSM, AWS Config, Lambda, SSM, AWS Inspector, S3, Code Deploy, CloudFormation, Azure DevOps, Nodejs, Dotnet Core, Python, Bitdefender, NxLog, Rapid7, CloudWatch metrics, events.

MULTIPLE DATACENTER MIGRATION (09/2019 – 04/2021) – CONNECTIVERX, NJ

Position: Migration Specialist/DevSecOps Engineer

- Created cloud migration assessments, strategies defining delivery architecture, creating the migration plans, designing the orchestration plans to assist in creating and executing of migration.
- Inventory management & planning, prioritization, architectural mapping of applications for migration to cloud. Coordinating with third party vendors to understand application model.
- Building subject-matter-expertise on programs/applications and supporting business & operations in defining processes & best practices.
- Conducting Proof of Concept for Latest cloud-based services like & holding Conditions of Satisfaction (COS) discussions with stakeholders to improve service delivery.
- Developing technical and security specifications for the targeted applications/workloads in AWS.
- Develop a migration approach (Lift & shift/Serverless/Containers/Hybrid) to move workloads from On-Premises to AWS or develop new cloud-ready application solutions.
- Using AWS Migration Hub & Server Migration Service (SMS), migrated ~150 virtual machines hosting ~250 applications from VMware vCenter to AWS Cloud.
- Successfully migrated legacy LAMP platform applications (~200) from Rackspace account to AWS Cloud using AWS Services like VPC, EC2, ASG, CloudWatch, API, Lambda, S3, RDS, Aurora, SQS, SNS etc.
- Built and deployed Docker containers to break up monolithic app into microservices, improving developer workflow, increasing scalability, and optimizing speed.
- Partner with global application development teams, technologists, and operational support teams positioned in global locations
- · Involved in phases of testing for example Integration testing, Smoke testing Performance testing and Load testing
- Utilized CloudWatch to monitor resources such as EC2, CPU memory, Amazon RDS DB services, DynamoDB tables, EBS volumes; to set alarms for notification or automated actions; and to monitor logs for a better understanding and operation of the system.
- Designed multiple CloudWatch Dashboards for monitoring production application performance.
- Developed and executed Shell scripts and worked on Python Scripting in different projects for automation of regular repeating tasks.
- · Provide security administration support with respect to users and privileges within all automation tooling
- Used Static code analysis and scanning tools like SonarQube, Veracode.
- Actively Involved in resolving / troubleshooting critical issues for enterprise application. Played the role of SME in various modules of
 the enterprise application and able to quickly nail down all the customer reported issues in the application during the migration
 phase.
- Ability to apply innovation and improvement to the data migration/support processes and to be able to manage multiple priorities
 effectively
- · Expertise in 3rd Party application migration (Lift & Shift and re-engineering applications)
- Working closely with other technology & Cloud architects for AD and for migration of on Prem to Azure & AWS projects.
- Improve code delivery and release with CI/CD pipelines.
- Lead a team of 5 people & trained them in various Cloud services & DevOps pipelines.

Services/Tools: AWS Migration Hub, Server Migration Service, EC2, ASG, Kubernetes, Elastic Container Service (ECS, ECR), Docker, ALB, WAF, Fsx, Storage Gateway, OpsWorks, CodeCommit, Git, Chef, Linux, Apache Tomcat, PHP, RDS(Postgres/Aurora), VPC, Route53, S3, Code Deploy, CloudFormation, Dotnet framework, Windows, IIS, MSSQL, SSRS, PowerShell, Shell Scripting, Python, Linux, dotnet core, windows kestrel.

ELECTRNOICS BENEFITS VERIFICATION (EBV) (06/2019 - 08/2019) - CONNECTIVERX, NJ

Position: Cloud Engineer/DevSecOps Engineer

- Analyzed & assessed legacy Benefits Investigation system to refactor/redesign it.
- Designed EBV (Electronic Benefits Verification) a cloud native serverless solution using AWS Lambda, Api Gateway, SQS, SNS, IAM,
 Step function, CloudWatch, etc.
- Configured apache proxy servers to call third party vendors like SureScript etc.
- · Using AWS CloudFront's, worked out routing strategy to use both legacy & new benefits verification system.
- Created multistage CI & CD YAML pipeline for continuous build & release management.
- Along with WAF & KMS keys, used AWS Cognito app client secret to secure API's.
- Installed CloudWatch agent to push OS level metrics & applications logs in to CloudWatch.
- Created multiple CloudWatch dashboard that helped in troubleshooting issues & Infra structure operations management.

Services/Tools: Docker, Linux, AngularJs, NodeJs, AWS Lambda, S3, Postgress DB, SiteSpeedIO Plug-In, VSCode, TFS, Notepad++, Grafana, AWS CloudFormation.

ENTERPRISE DATA WAREHOUSE (EDW) (11/2018 – 05/2019) - CONNECTIVERX, NJ

Position: Cloud Engineer/DevSecOps Engineer

- Understood Enterprise data warehouse design & wrote cloudformation scripts for various components of EDW.
- Worked with Data engineers on CI/CD pipelines (AWS CodeCommit, Codebuild, CodePipeline, etc) for end-to-end automation of entire EDW release cycle.
- Setup an Extract Transform Load (ETL) process for moving messaging data from ~600 highly normalized application tables with inconsistent data quality in SQL Server into 1 big de-normalized database table in Redshift.
- Extract & Transform stages run on Amazon EMR service w/ Apache Spark (Python API) delivering fault-resilient parallel data processing across a cluster of instances available in most EC2 configurations.
- Built Pub-Sub system EventStreamer for seamless flow of events to EDW from various subsystem in company.
- Wrote serverless solution using AWS Lambda & Cloudwatch event that triggers ETL flow on schedule or on-demand on incremental data loads.
- Using AWS network load-balancer, setup a secure SSH tunnel between Looker (Analytics software) & private data sources like AWS redshift & on-prem data bases.

Services/Tools: AWS RedShift, EMR, CloudFormation, AWS Lambda, AWS Code Pipelines, CodeBuild, CodeCommit, Step functions, CloudWatch, S3, RDS, MSSQL, Looker.

APP CONTAINERIZATION (09/2017 - 10/2018) - WORLD BANK GROUP, DC

Position: Cloud Engineer/DevSecOps Engineer

- Closely worked with app team to understand existing app structure & dependencies for docker container deployment.
- Finalized base images for back-end/front-end services & publish them into ECS private repository.
- Based on app team inputs, created three separate Cloud Formation template to create app image repository, Application Load balancer & AWS Fargate Cluster.
- Created docker file & shell scripts for pushing app package to the private repository.
- Worked on AWS secret manager & IAM roles to secure credentials & keys.
- Installed & configured SSL certificates on application load balancers

Services/Tools: AWS ECS (Fargate cluster), Application Load balancers, CloudWatch, Docker, Linux, AWS CLI, Shell scripting, CloudFormation.

BOT BUILDER (01/2017 - 06/2017) - NOVARTIS PHARMACEUTICALS, NJ

Position: Azure Engineer/Developer

- Closely worked with Novartis Medical Information teams and IT stakeholders to understand their IT needs & implemented proposed business process workflow as end-to-end IT solution.
- Developed PoC's using Microsoft Azure, ASP.NET, C#, Nintex workflows, etc.
- Designed Developed a ASP.NET MVC App used for managing Knowledge Base in Azure SQL.
- Provisioned Q&A maker service, Bots framework & Cognitive services.
- Designed & Developed interface to allow user to upload Questions & Answer as blob storage, FAQ link & Question with answers.
- Worked with Cloud Engineering team for RM template execution & post deployment integration.

Services/Tools: Microsoft Azure SQL, Q&A Maker Bot Service, Microsoft Azure Cognitive Service, MVC WebApp, C#, Azure Blob Storage, Visual Studio IDE & TFS.