# AWS CLOUD ENGINEER

# Introduction

I am a proactive AWS Solution Architect with over five years of comprehensive experience in the IT industry and with majority of those years in AWS cloud computing and an immense fascination with everything as code (DevOps) and delivering infrastructure solutions from design to production. I have in-depth knowledge of various AWS services, including EC2, ECS, System manager, EKS, VPC (NAT, Peering, VPN), IAM, Lambda, S3, Cloud Front, Ansible, RDS, Dynamo, ElastiCache, Redshift, Route 53, LB, Auto Scaling Group, CloudWatch, AWS Kubernetes, SNS, SQS, AWS Migration, API Gateway, AWS Security, CI/CD tools like Jenkins (code commit, Code Build, Code Pipeline, Code Deploy) and a grasp of DevOps culture, methodologies, and automation. I have set up disaster and recovery solutions to maintain and establish backup and recovery processes to safeguard data with strict respect to SLA (RPO and RTO). Also, I have a good understanding of the fundamentals of using Terraform and CloudFormation to provision resources on AWS.Ability to multi-task and context-switch effectively between different activities and teams. Ability to work in a rapidly changing environment, organize and plan work independently. Flexible, team player with excellent written and communication skills and very good at documentation.

**RECENT PROJECTS**

* Migration of SQL Server Databases to AWS
* Configured EC2 instances, and update software at scale making use of System Manager and Ansible.
* Provisioning of Resources at scale using CloudFormation and Terraform.
* Implementing HA/DR solutions utilizing Replication like CRR or SRR

# Professional Experience

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| **REV GROUP, INC MAY 2021 – PRESENT**  **BROOKFIELD, WISCONSIN(REMOTE),**  **AWS CLOUD ENGINEER.**   * Created AWS S3 buckets, Managed cloud trail logs and objects within each bucket. * Built and configured virtual data centre in AWS to support Enterprise Data. * Built fully automated CI/CD pipelines in Jenkins. * Configured KMS using IAM to provide encryption/decryption keys to secure S3, EBS and RDS. * Involved in 24x7 support rotation for Production, Test and Development Databases. * Knowledge of configuration management using Ansible. * Worked with Custom AMI's, created AMI tags modified AMI permissions. * Created Security Groups, configuring Inbound and Outbound rules, creating, and importing Key Pairs. * Provisioned AWS resources using the console as well as CLI. * Configured network infrastructures within VPC with public and private subnets, configured routing tables, security groups and internet gateways. * Implement and maintain the monitoring and alerting of production and corporate servers/storage using CloudWatch using Centralized Data Dog monitoring tools. * Configured NACLs, Security Groups and WAFs to secure the application and VPC network depending on access parameters provided and conditions. * Encrypted and managed both server-side encryption such as SSE-S3, SSE-C, SSE-KMS and AWS Client encryption library, and client-side encryption of S3 and databases in the cloud. * Migrated databases and workloads from on premise servers to the cloud using tools such as AWS DMS, Schema conversion tool, AWS Migration Hub, Snowball, Snowball Edge, and AWS server migration service. * Created and managed IAM user accounts and role-based policies for access to AWS services. * Implemented and maintained monitors, alarms, and notifications for EC2 instances using CloudWatch and SNS. * Evaluated and improved existing AWS deployments. * Performed S3 buckets creation, access policies, and archive outdated data to Glacier through Life Cycle Policy configuration. * Created low latency website using S3, Cloud Front, and Route53. * Installed Apache and Nginx Web Server on EC2, (proxy server as needed). * Created and managed users, permissions, directories, and files in Linux environment. * Implemented compliance with CIS Benchmark on AWS environment. * Enforced company policies and procedures during design and implementation. * Designed and deployed monitoring metrics, and logging systems on AWS environment. Application and system log analysis using CloudWatch, Cloud Trail, Data Dog, and Logic Monitor. * Designed, developed, and implemented high availability, backup and recovery strategy for applications and database. * Hands-on experience and good knowledge of AWS services: EC2, S3, VPC Endpoints, VPC Private Link, VPC Peering, Transit VPC, Network Protocol, Subnetting (Private and Public), IPsec, VPN, Route53, ELB, Auto scaling, SQS, SNS, IAM, DynamoDB, Cloud Front, Cloud Formation, CloudWatch, Cloud Trail, Storage Gateway, internet Gateway, Kinesis, code deploy and Guard duty. * Configured and used automated services such as code deploy, Redshift glue, Elastic beanstalk, and lambda. * Performed migrations using tools like Cloud Endure, SMS, DMS, SCT and CDC. * Performed the creation of VPC Peering and Flow logs on VPC for monitoring of built VPCs. * Provided SQL database administration support for over 190 instances hosted in AWS Commercial cloud. * Responsible for allocating, releasing, associating, and disassociating elastic IP addresses. * Implemented Auto Scaling for scaling out to ensure availability and scalability of customer websites and applications. * Migrated the production MySQL schema to the new AWS RDS Aurora instance. * Troubleshoot various customer technical problems and adhere to best practices. * Cost and performance monitoring of resources and applications using Aws CloudWatch, including creating alarms to monitor metrics such as EBS, EC2, ELB, RDS, S3, SNS and configured notifications for the alarms generated based on events defined. * Performed uploads and migrated workload between S3, Glacier and snowball using multipart upload and transfer acceleration. * Collaborated with application developers, Project Managers and QA analysts to ensure proper testing, configuration, and deployment. * Worked with our current application teams to understand our current applications and make migration recommendations and to be architectures in AWS * Responsible in managing all aspects of the software configuration management process including code compilation, packaging, deployment, release methodology and application configurations. * Performed backup and recovery in on premise SQL environments. * Performed cloning, database refresh and migration in oracle, MYSQL server environments on-premises. * Performed patches at scale using Ansible and System Manager. * Experience on Version Control System (VCS) like GITLAB, GIT-Hub. |
| **dell Technologies – orlando, florida December 2017 – MAY 2021** **AWS ARCHITECT**   * Leverage AWS cloud services such as EC2, auto-scaling and VPC to build secure, highly scalable, and flexible systems that handled expected and unexpected load bursts. * Setup and configured VPC Private Link, VPC Endpoint, Direct Connect, Transit VPC, VPC Peering, Reverse Proxy Caching, CDN, IPsec and VPN for secure data transfer, and secured connection to other AWS services and other AWS accounts. * Used Network health monitoring tools (Cloud Watch, Logic Monitor) * Created and configured Redshift clusters.   Configured EMR Cluster, used Hive script to process the data stored in S3 Bucket. Created Data-pipelines and configured EMR Cluster to offload the data to Redshift. * Wrote some of the cron jobs to notify the administrator when SQS Queue size reaches certain limit.  Build Amazon EC2 instances and assigned required firewalls using security group (SG) and Network Access Control List NACL) rules. * Responsible for bucket creation, user account creation, access permissions and privileges to users as well as policies and IAM role-based policies.   Implement and maintain the monitoring and alerting of production and corporate servers/storage using Cloud Watch. * Analysed logs and performed root cause analysis for various issues coming up on daily basis. * Managed network security using Load balancer, Auto Scaling, Security groups and NACLS. * Designed, configured, and deployed Amazon Web Services (AWS) for applications utilizing the AWS stack (Including EC2, Route53, S3, RDS, Direct Connect, Cloud Formation, Cloud Watch, SQS, IAM), focusing on high-availability, fault tolerance, auto-scaling, load-balancing capacity monitoring and alerting. * Cost and performance monitoring of resources and applications using Aws Cloud Watch, including creating alarms to monitor metrics such as EBS, EC2, ELB, RDS, S3, SNS and configured notifications for the alarms generated based on events defined.   Created monitors, alarms, and notifications for EC2 hosts using Cloud Watch.   * Experience working with IAM to create new accounts, roles, and groups. * Experience in creating alarms and notifications for EC2 instances using CloudWatch. * Experience involving configuring S3 versioning and lifecycle policies to and backup files and archive files in glacier. * Utilize EBS to store persistent data and mitigate failure by using snapshots. * Experience in deploying and monitoring applications on various platforms using Elastic Beanstalk. * Created an AWS RDS Aurora DB cluster and connected to the database through an Amazon RDS Aurora DB Instance using the Amazon RDS Console. * Experience in Configuring an AWS Virtual Private Cloud (VPC) and Database Subnet Group for isolation of resources in the cloud. * Experience in designing high availability applications on AWS across availability zones and regions. * Experience in encryption in the cloud and on-premises servers. * Fundamental knowledge of Python and shell scripting. * Windows 10-11, Microsoft Active Directory, utilization of GPOs, MS Office 365, PC hardware installation and general troubleshooting. * Microsoft professional. * Mobile device management, including IOS and Android devices, Enterprise encryption solutions, Windows PC/laptop management via Active Directory. * I have proven analytical, troubleshooting, and problem-solving skills. * I have proven ability to multi-task, effectively determine priorities, and meet SLA’s. * Excellent communication and relationship-building * I am adaptable and flexible in this fast-changing industry and any work environment. |
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**CAMTEL Cameroon Inc. 05/01/2017 - 11/24/2017**

**Role: Intern as a SQL Server Database Administrator**

* Installed SQL Server 2008 on advanced servers, applied security fixes,
* Migration of SQL Server 2005 Servers to SQL Server 2008
* Installed and configured MS SQL Server 2008 R2, supported all Production and development servers.
* Maintained database response times in 24X7 Production environments.
* Proactively generated performance reports.
* Automation of DBA Tasks and monitoring
* Planning and implementation of database backup/restore and disaster recovery.
* Analyzing business requirements and build logical data models that describe all the data.
* Configuring and administering Database Mirroring, Log Shipping on SQL Server 2008R2.
* Developing SQL scripts for maintaining administration tasks.
* Indexes Maintenance
* Database Mail and Operator
* reports that draw content from a variety of data sources.
* Capacity Planning and resource allocation
* Monitoring standby databases to ensure high availability.

# Education

* BSc in Computer Engineering - National Polytechnic Bamenda, Cameroon. 2017
* Coursework towards Cloud Infrastructure Security Degree - Valencia Community College Orlando, FL.

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| **Tools** | AWS Snowball, AWS Data Migration Service, AWS Schema Conversion Tool, AWS Snowball Edge, Elastic Load Balancer, Remote Desktop Connection & PowerShell.  RedHat Enterprise Linux (RHEL), Ubuntu, Git. |
| **Cloud and Database Utilities** | Load balancers, TCP/IP, HTTP/HTTPS, SSH, SSL.  Cloud AWS EC2, VPC, EBS, AMI, SNS, RDS, ECS, EBS, CloudWatch, CloudFormation AWS Config, S3, Cloud Trail, IAM. Transparent Data Encryption (TDE), Dynamic Data Masking (DDM), Always Encrypted, High Availability, Traditional Failover Clustering, AlwaysOn, SQL Operator, Snapshot, Transaction and Merge Replication. Redgate, Service Now and Jira. |
| **Languages** | Python, SQL, JSON, YAML. |
| **Databases** | RDMS, DynamoDB, Amazon Redshift, ElastiCache |

# References

Available upon Request

[linkedin.com/in/blaise-ngwa](https://www.linkedin.com/in/blaise-ngwa?lipi=urn%3Ali%3Apage%3Ad_flagship3_profile_view_base_contact_details%3BIMnqS8DeQhKg0OGBiBLsJA%3D%3D)