

# Mahesh Kumar Koheda

AWS Cloud Engineer | DevOps Engineer | SRE

Gmail: [kohedamahesh1989@gmail.com](mailto:kohedamahesh1989@gmail.com)

LinkedIn: <https://www.linkedin.com/in/maheshkoheda/>

Ph: 2262128862

Location: Toronto, Canada

## PROFESSIONAL

- Having Over **6+ years of IT** experience and **5+ years** as an **AWS Cloud & DevOps Engineer** in managing and **deploying** applications using **AWS services** such as **EC2, S3, VPC, IAM, EBS, CDK** and **RDS** and an in-depth understanding of **cloud infrastructure, storage solutions, and data lifecycle management**
- Expert in using **AWS Lambda, Auto Scaling Groups, Elastic Load Balancing, and AWS Systems Manager** for automating **deployment and management**, resulting in increased operational efficiency, a boost in system reliability, and reduced **resource wastage**
- Experienced in **container management and orchestration** using **Docker and Kubernetes** which ensures seamless container **deployment, scaling, and operation** across various environments by implementing **container registries, pod security policies, and efficient resource allocation strategies**
- Expertise in **AWS migration projects**, in **planning and executing migration strategies** using **AWS Migration Hub, Database Migration Service, and Server Migration Service** which certified a smooth and efficient transition of applications and services to the **AWS cloud** with minimal **downtime**
- Proficient in Infrastructure as Code (IaC) using **Terraform, AWS CloudFormation, and Git**, specializing in creating automated, repeatable **cloud setups** that enhance scalability and **version control** efficiency
- Adept at applying **SRE** principles to **AWS** environments, focusing on reliability, scalability, and automation to meet stringent **SLAs**
- Skilled in **building and maintaining CI/CD pipelines** using **AWS Code Pipeline, Jenkins, GitLab, and GitHub**, resulting in faster delivery of code changes which **integrates automated testing and code quality** checks, leading to a reduction in **deployment errors** and enhanced reliability
- Skilled in implementing robust **monitoring and security** measures using **AWS CloudWatch, AWS Security Groups, AWS CloudTrail, and AWS Config** that ensures high system performance, security compliance, and **continuous audibility**
- Skilled in deploying **ArgoCD** for **GitOps** automation, managing artifacts with **Nexus**, and orchestrating development environments using **Vagrant**, enhancing delivery, dependency control, and team productivity
- Experienced with various **database** platforms, such as **MySQL, PostgreSQL, MongoDB, and Amazon RDS**, ensuring **optimal performance**
- Specialized in **Python and Bash scripting** for automating **complex tasks**, leading to an increase in task efficiency which develops **scalable scripts** and applications with a focus on **error handling, logging, and API integrations**, resulting in an enhancement in **script functionality and reliability**
- Knowledgeable of **Azure resources**, including **Virtual Machines, Azure Active Directory, and App Services**, to support scalable and secure cloud solutions for business-critical applications
- Knowledgeable in **network setup and optimization** using **AWS VPN, Amazon VPC, Direct Connect, and Network Load Balancer** that designs strong and secure **Network infrastructures** emphasizing high availability, **fault tolerance, and secure data transmission**
- Specialized in **Datadog** for **end-to-end cloud observability**, adeptly instrumented and monitored **AWS cloud infrastructures and workloads** to pinpoint and **troubleshoot system performance bottlenecks**, demonstrating a resilient and fail-safe **security environment** through the methodical setup of real-time **security logs** and response systems
- Demonstrated marked expertise in **integrating and managing Kafka in New Relic**, where orchestrated the high-volume data flow between components within the **microservices architecture** fueling the **powerful real-time operational** instinct and tuning of the enterprise application stack.
- Good Understanding of **Agile methodologies**, utilizing tools like **Jira and Confluence** for **project management and team collaboration**, **Scrum, and Kanban** frameworks to ensure efficient workflow and continuous improvement in **project delivery**

## EDUCATION

- Masters in Mechatronics Engineering, NITK University, India Jul 2011 - Jun 2013
- Bachelors in Mechanical Engineering, Osmania University, India Jun 2007- May 2011

## CERTIFICATIONS

- AWS Certified Solutions Architect - Associate (SAA-CO3)
- Certified in Harshi Corp: Terraform Associate (003)

## TECHNICAL SKILLS

Core AWS Services	EC2, S3, VPC, VPN, ECR, EBS, IAM, AMI, System Manager, CDK, Cognito, KMS, CloudFormation, CloudTrail, CloudWatch, DynamoDB, Route 53, Security Groups, Lambda, Auto Scaling Groups, Application Load Balancer, Network Load Balancer, CloudFront, RDS, Azure, EKS
CI/CD and Version Control	AWS Code Commit, Code Deploy, Code Build, Code Pipeline, Git, GitHub, GitLab, Bitbucket, Terraform, Ansible,
Containerization	Docker, Kubernetes
Build and Automation Tools	Maven, Jenkins, SonarQube, Tomcat
Database Systems, Monitoring	SQL, MySQL, PostgreSQL, Prometheus, Grafana, Datadog, New Relic
Scripting, OS & Other	Python, Bash, Powershell
Operating system & other	Windows, Linux, Ubuntu, Agile, Jira, Confluence

## EXPERIENCE

**Cloud DevOps Engineer**      **OTT Financial Group, Canada**      **April 2024 – Present**

- Designed and automated CI/CD pipelines using Jenkins, GitHub, and AWS CodePipeline, reducing deployment time by 60% and eliminating manual intervention for seamless releases ensuring secure and consistent delivery of updates across the DLP infrastructure.
- Developed Infrastructure as Code (IaC) using Terraform and CloudFormation, ensuring uniform provisioning and reproducible environments across development, testing, and production stages, improving efficiency and enhancement of on-premises Data Leakage Prevention (DLP) controls, minimizing manual effort and improving efficiency.
- Optimized application scalability & portability using Docker and Kubernetes, deploying with Helm Charts to streamline Kubernetes configurations and enhance scalability while reducing manual interventions by 40%.
- Provisioned and managed AWS resources, including EC2, S3, IAM, VPC, and ECS/EKS, ensuring efficient load balancing, auto-scaling, and health monitoring for containerized applications
- Strong experience with RedShift for data warehousing and analytics, and AWS Glue for data integration and ETL workflows.
- Implemented proactive monitoring and alerting systems with Grafana, Prometheus, and AWS CloudWatch, achieving a 40% increase in uptime through enhanced incident response and system visibility
- Enhanced system security and compliance, integrating SonarQube for code quality checks, aligning with PCI DSS standards, and implementing vulnerability management, file integrity monitoring, and intrusion detection aligned with the MITRE ATT&CK framework
- Managed SQL databases like MySQL and PostgreSQL, optimizing data storage, retrieval, and manipulation to support business-critical applications

- Architected a resilient and scalable cloud infrastructure to facilitate migrating from on-premises to AWS for improved performance, availability, and operational resilience
- Supported hybrid environments with VMware solutions, maintaining seamless integration and optimized performance between on-premises infrastructure and cloud resources
- Automated configuration management using Ansible, managing configuration drift, deploying roles for application configurations, and reducing manual errors through consistent, repeatable deployments
- Implemented a security awareness tool and conducted training sessions to educate employees on identifying phishing emails, encouraging them to report suspicious messages to ensure better security hygiene across the organization
- Integrated security protocols like Microsoft 365, Azure Active Directory, and MFA, ensuring robust access control and operational continuity while supporting user management, backups, and remote support

## **AWS Cloud Engineer**

**Genetec, Canada**

**Oct 2021 – Mar 2024**

- Optimized AWS cloud solutions incorporating services like EC2, S3, VPC, Lambda, RDS, Elastic Load Balancing, CloudFront, IAM, DynamoDB, Auto Scaling, and CloudWatch for high-performance computing and ensured high uptime with efficient resource management and security, including advanced IAM roles, policy management, and encryption standards
- Engineered CI/CD pipelines using Jenkins, AWS Code Build, Code Deploy, and Code Pipeline, integrating blue-green deployments for zero-downtime updates that led cloud migration from legacy systems to AWS, focusing on scalability and minimal disruption
- Orchestrated Docker and Kubernetes applications on AWS ECS, emphasizing load balancing, auto-scaling, self-healing, and efficient management of multi-container pods, achieving a high success rate
- Developed Python and Bash scripts for automated system health checks and log analysis and configured AWS CloudWatch and CloudTrail for real-time monitoring and comprehensive log management.
- Implemented Infrastructure as Code (IaC) practices using Terraform and AWS CloudFormation, automating cloud resource provisioning and maintaining cutting-edge configuration management
- Leveraged DataDog to monitor, troubleshoot, and optimize AWS infrastructure, ensuring seamless real-time data visualization and service dependency management
- Tackled performance management and alert systems, orchestrating pre-emptive scalabilities and cloud metrics software into key service insights
- Instrumented and improved Kafka streaming services for near-instant admin data transport, secured architecture resilience, and messaging trackability making sure of project and spec updates
- Administered and maintained a global DLP security environment utilizing tools like Symantec DLP, Splunk, and Netskope. Partnered with risk management teams to address security requirements and provided on-call support to quickly resolve production incidents, ensuring high system availability and effective incident response.
- Administered high-availability databases like Amazon RDS, Aurora, and DynamoDB, focusing on replication, and read/write optimization strategies
- Engineered secure and scalable network infrastructures in AWS, utilizing VPC peering, Direct Connect, and advanced routing techniques. Implemented stringent SSL/TLS and VPN security protocols, ensuring system reliability, performance optimization, cost control, and compliance

## **Cloud Administrator**

**Cyient, India**

**Sep 2019 - Sep2021**

- Orchestrated AWS services including EC2 Auto Scaling, S3 with lifecycle policies, RDS Multi-AZ, VPC, and Lambda with API Gateway, demonstrating AWS infrastructure and best practices
- Utilized Infrastructure as Code with AWS CloudFormation and Terraform for scalable, idempotent cloud environments, emphasizing advanced orchestration with CloudFormation's custom Resource Providers
- Engineered VPCs focusing on network architecture with NAT Gateways, AWS Site-to-Site VPN, and Direct Connect, ensuring resilient, secure network infrastructure aligned to AWS Well-Architected Framework
- Managed AWS security by administering IAM roles and policies, Security Groups, and NACLs, ensuring least privilege access, resource tagging, and cost optimization using AWS Resource Groups, Tag Editor, Budgets, and Cost Explorer for financial governance alignment

- Configured S3 buckets with versioning and replication to achieve high uptime, managed RDS with read replicas resulting in a performance enhancement, and expertly handled DynamoDB with Global Tables, thereby improving global data access speeds, showcasing comprehensive expertise in AWS storage and database administration
- Employed AWS monitoring tools like CloudWatch, CloudTrail, and AWS Config for comprehensive system observability, compliance tracking, and adherence to AWS operational best practices
- Developed numerous automation scripts using AWS SDKs in Shell, Python, and PowerShell, enhancing cloud workflows, and implemented AWS Lambda and Step Functions, achieving a reduction in execution times and operational cost savings

## **Linux Administrator**

**Cyient, India**

**Nov2017 - Aug 2019**

- Worked on Linux server installations and configurations, adept at managing complex network structures including firewalls, VPNs, and routing schemes
- Monitored server performance metrics for executing fine-tuned optimizations, and conducted comprehensive traffic analyses to inform strategic capacity planning, ensuring optimal resource allocation and scalability of system infrastructures
- Expertly diagnosed and resolved complex issues within Linux-based systems and network services through advanced troubleshooting methodologies, significantly minimizing system downtime and optimizing operational performance
- Spearheaded the implementation of robust security protocols and conducted comprehensive system audits to ensure stringent adherence to industry-specific standards, markedly enhancing continuous business operations and regulatory compliance
- Upheld a secure IT environment by enforcing rigorous security measures in compliance with prevailing industry standards, concentrating on sophisticated backup and disaster recovery frameworks to fortify data preservation and service resilience during emergencies
- Devised and executed strategic plans for data preservation and ensured uninterrupted service continuity in the face of emergencies, thereby solidifying the IT infrastructure's defense against potential disruptions and threats
- Leveraged advanced scripting techniques to automate routine administrative tasks on Linux servers, significantly boosting operational efficiency and reducing manual intervention in system management tasks
- Administered and optimized virtual environments using VMware and KVM, seamlessly integrating cloud services with existing on-premises systems, thereby enhancing system integration and leveraging cloud efficiencies for improved overall performance

## **Key Achievements:**

### **Enhanced Deployment Efficiency and Automation**

- Successfully designed and automated CI/CD pipelines using Jenkins, GitHub, and AWS CodePipeline, achieving a 60% reduction in deployment time and eliminating manual intervention for seamless releases.

### **Cloud Migration and Scalability Optimization**

- Spearheaded migrating from on-premises to AWS, leveraging Infrastructure as Code (IaC) tools like Terraform and CloudFormation. This resulted in improved performance, high availability, and operational resilience while optimizing containerized application scalability using Docker and Kubernetes.