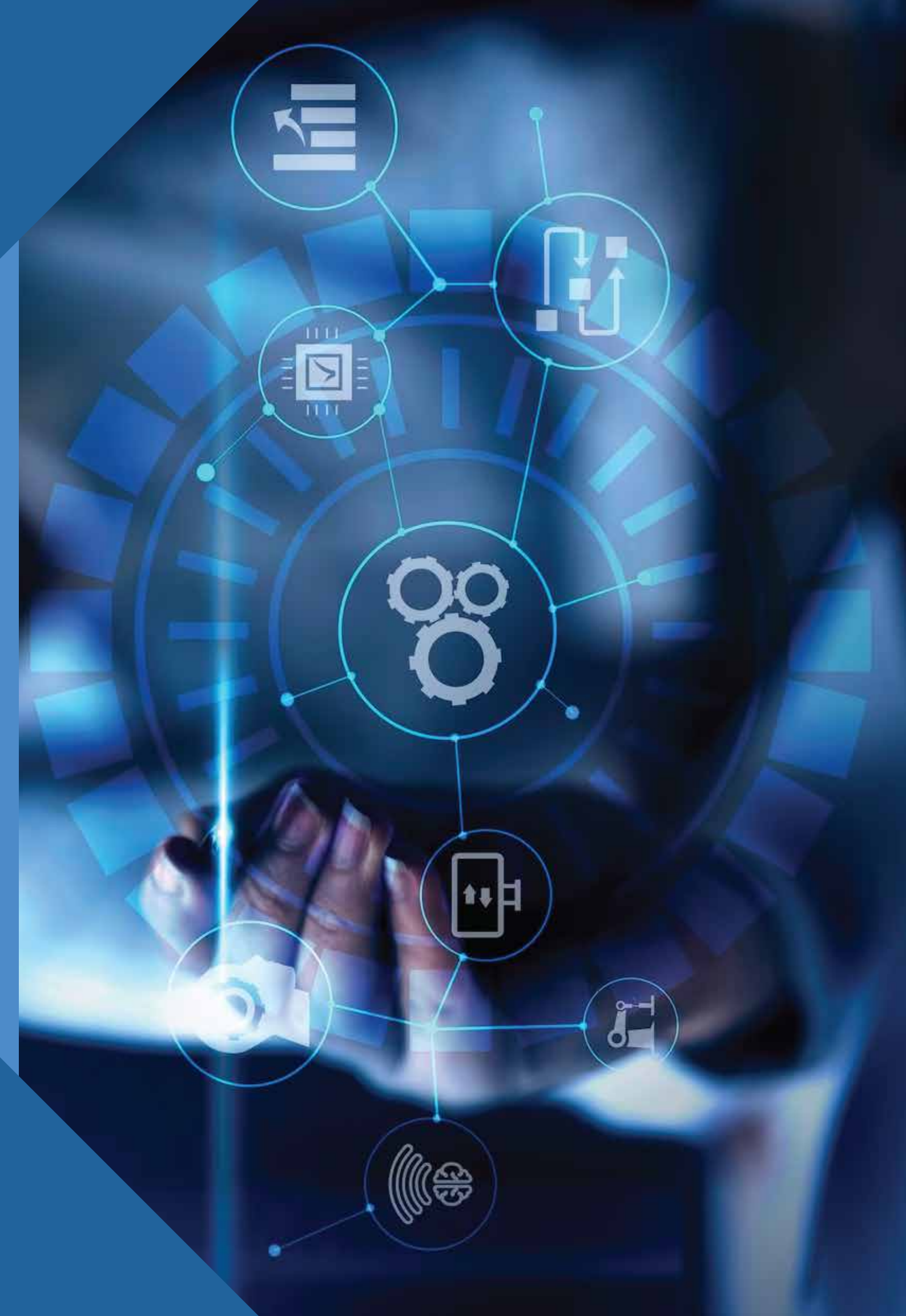




Enabling Organizations to automate **Application Deployment with DevOps Best Practices**

How CloudThat helped three enterprises modernize their application environments to release new features with zero downtime, high availability, and low latency by availing DevOps practices.



Rupeek

Industry

Fintech

Implementation Benefits

- Uptime increased from 95-98% to 99.9%
- Downtime reduced from 3-5% to 0.1%
- Cost reduction by 45%

A Snapshot

The Rupeek team had the focal point of shedding existing manual gold loan processing processes and building fault-tolerant, highly available applications hosted on the AWS cloud with DevOps best practices.

Client's Voice

“

I would like to thank the CloudThat team for being an integral part of our journey. Your team has gained our confidence, and I can reach out to you for help and support anytime. Thank you so much for your trust and sincerity

Solutions

- Highly available and fault-tolerant production environment and Amazon EC2 Auto Scaling group (ASG)
- Configured standard Amazon Machine Images (AMI) and enforced their use while launching the instances.
- Automated the process of installing Prometheus exporters, New Relic, and SumoLogic agents using Ansible playbooks.
- Automated Grafana dashboard backups and stored them in S3.
- Configured all the production applications in private subnets with application load balancers in the public subnet.
- Ensured storing of all the credentials with restricted access in the AWS Secret Manager.
- Facilitated different domains for internal, external, Production, and non-production purpose and managed all the hosted zones in Route 53.
- Configuration of the Jenkins pipeline for Dev, UAT, Beta, and Production environment.
- Implemented the Amazon Data Lifecycle Manager for EC2 snapshots.

Results

With a restructured DevOps team, the client is now assured of a continuous delivery process, leading to fewer defects and a change failure rate. Ensured new features are released faster with 99.9% uptime, high availability, 0.1% downtime, and 45% cost reduction.

Zoomcar

Industry

Self-Driving Car Rental Service

Implementation Benefits

- 60% Containerization of applications
- 99.9% Uptime released with new features
- Lambda Function implemented for several automation solutions

A Snapshot

The ZoomCar team wanted to refine the AWS infrastructure and improve the performance, scalability, and cost optimization along with standard DevOps practices to support customer growth.

Client's Voice

“You are known for ownership in Zoomcar DevOps. You always come forward willingly to accept responsibility and assist people. You believe in the outcome and constantly provide constructive input. Within a short span of time, you have proved your effective DevOps skills. Your assistance beyond was our expectations, especially given our constrained bandwidth. Most of the operational difficulties (such as logging) could not have been fixed without your assistance”

- Mohit Kumar

Solutions

- Deployed applications in multiple environments like development, Quality Assurance (QA), User Acceptance Testing (UAT), and production.
- Implemented highly available, scalable, fault-tolerant microservices deployed on Amazon EKS clusters across multiple environments with horizontal pod autoscaling and cluster autoscaling enabled.
- Implemented Continuous Integration, Continuous delivery, and deployment to support hotfixes, roll-back on failure, and multi-environment deployment following the DevOps best practices.
- Implemented application performance monitoring in New Relic to understand and trace dependencies across the distributed system to detect anomalies, reduce latency, squash errors, and optimize customer experience.
- As a content delivery network (CDN), Implementing cybersecurity, web, and internet security for bot detection and alerting system to avoid malicious attacks on mobile and web applications provides an extra edge to the business.
- Used Jira Boards for planning, tracking, releasing, and reporting the issues to have a synchronous workflow within the teams.

Results

Now the client has a continuous delivery process with a restructured DevOps team, leading to fewer defects and a change failure rate. In addition, the client is now equipped with cross-skilled engineers who can collaborate on various projects and achieve better operational support to ensure that the fixes are much faster than before.

BeyondSquare Solutions

Industry

IT services and IT Consulting

Implementation Benefits

- Multi-environment for application deployment
- New feature releases with zero downtime
- Deployments spanning within minutes

A Snapshot

BeyondSquare had a single Kubernetes deployment for six different applications in a single instance. The challenge was to segregate operational services on a single multiport. The existing system lacked continuous integration and deployment procedure, and thus, tracking code and deployment changes were not simple. Moreover, monitoring and logging solutions required centralized management with a better retention strategy.

Client's Voice

“ CloudThat has the right set of people and expertise to get the job on various Cloud platforms. They have always been very supportive and ensure that the projects are done in time and in cost-effective manner”

- BeyondSquare Team

Solutions

- To ensure network-level isolation across environments dev, stage, and production, centralized services termed as management were placed under different VPCs. Security groups were configured as virtual firewalls for EC2 instances to control incoming and outgoing traffic accordingly.
- Continuous Integration & Continuous Delivery (CI/CD) implementation was put into place with AWS CodePipeline ensuring faster deployments with approvals helping to test features before moving to the prod environment. Pipelines were configured for each application in all three environments.
- Highly available, scalable, fault-tolerant microservices deployed using the deploy stage of the pipelines onto the Kubernetes cluster
- Infrastructure and application monitoring put into action with AWS CloudWatch and EFK stack.
- Kubernetes cluster state backups were ensured and stored in S3 using Velero. The same tool was used at the end client's cluster to restore the cluster state.

Results

Client's business growth is fostered by setting up a multi-environment for application deployment by satisfying the organizational SLAs and internal process framework. By embracing automation, the client was able to optimize their costs, reduce downtime, and make application delivery more efficient.

What Differentiates Our Solutions

AWS Partner - DevOps Services Competency

Pioneering DevOps and DevSecOps space by being an AWS Partner - DevOps Services Competency.

[Learn more](#)

An authorized partner for all major cloud providers

A cloud-agnostic organization with the rare distinction of being an authorized partner for AWS, Microsoft, Google, and VMware.

[Learn more](#)

A house of strong pool of certified consulting experts

150+ cloud-certified experts in AWS, Azure, GCP, VMware, etc.; delivered 200+ projects for top 100 fortune 500 companies.

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About CloudThat

Incepted in 2012, CloudThat is the world's leading training & Consulting services provider on Cloud, DevOps, Security, AI&ML, IoT, and Big Data for midsize and enterprise clients globally. Our business goal is to provide global services on Cloud Engineering, Cloud Training, and Cloud Expert Line. The expertise in all major cloud platforms including Microsoft Azure, Amazon Web Services (AWS), and VMware.

