

# Rapyder Migrates a Ride-Sharing Startup from GCP to AWS



## Business Needs

The Customer was running multiple workloads on Google Cloud Platform and had planned to migrate their entire B2C application from GCP to AWS. These were Java based applications to cater to their customer facing mobile app APIs with Backend Database as MySQL.

This migration was expected to be done with very minimal downtime of maximum 30 minutes.

## Solution Approach

Consultants at Rapyder had detailed discussions with the client to understand their requirement and studied the working of their application portfolio to provide an optimum solution for the migration. To address the objectives defined in the statement of work, our Solution Architects stitched the solution around AWS services.

The following solution was implemented:

- AWS Mumbai region was considered for the hosting of applications.
- All the servers behind the application load balancers were provisioned in private subnets in different AZ, which in turn was behind the load balancer.
- Load balancer would offload the SSL certificate and send traffic to appropriate instance.
- Public facing servers were launched in public subnet based on the requirement.
- OpenVPN server was provisioned to connect directly to the instances in private servers from local.
- RDS MySQL with Read replica was configured for Database.
- AWS ACM used for SSL certificates to be applied on load balancer.
- ElasticSearch was provisioned to be used as managed service and was replicated to AWS by backup and restore.
- RabbitMQ and ActiveMQ were configured on EC2.

- NAT Gateway was used for all outgoing internet connections from private servers.
- AWS CloudTrail is enabled to monitor activity on the AWS account.
- AWS CloudWatch setup is done monitoring of the servers.
- Route53 will be used as DNS Service for weighted routing between GCP and AWS before routing 100% traffic to AWS.
- Database Migration was used for migration as the Customer had a very slim window for the cut-over to production.



## Reaping Rewards

- Highly Available and a very Scalable architecture has been provisioned at all layers
- The Client is expecting a huge growth in its own Customer base year-on-year, and with the infrastructure provisioned by Rapdyer, they are now well prepared to meet the challenges of the near future.