

Mindgate & Rapyder collaborated to Ensure 99.99% Application Availability



Introduction

Mindgate, founded in 2008, chronicled stupendous growth and established a strong presence in India, the Middle East, and the ASEAN market with over 65 banks.

Mindgate enables API-based integration from bank accounts to social payments like Google Pay and WhatsApp Payments for P2P and P2M transactions and has processed more than 30 million transactions a day on their Mindgate platform.



Business Need

In 2022, Mindgate partnered with Rapyder to embark on their inaugural cloud infrastructure deployment. Their objective was to host their recently developed application, vTransact DigiTB, on the AWS cloud platform. The application, currently in operation, demands continuous 24x7 uptime, necessitating vigilant infrastructure monitoring and dedicated support, a responsibility effectively assumed by Rapyder. In addition, Mindgate sought to establish environments for User Acceptance Testing (UAT), Production, and Disaster Recovery (DR).

» Industry

Fintech services, and Payment solutions

» Offerings

Greenfield and DR Setup

» AWS Services

EKS, Aurora, API Gateway, Lambda, Route 53 CloudTrail, CloudWatch, ALB, GuardDuty, Security Hub, Route53, SNS, S3, WAF.

Solution Approach

Rapyder collaborated with Mindgate to conduct a comprehensive assessment of their existing application and infrastructure setup. Leveraging native AWS security and monitoring tools, Rapyder ensured the seamless implementation of a scalable, secure, and highly available infrastructure. The team established separate organizational units for Development, Production, and Disaster Recovery within the existing landing zone.

Rapyder expertly hosted the application on web and app servers, utilizing AWS-managed database services for data storage. An Active Disaster Recovery setup was meticulously crafted, guaranteeing uninterrupted access to the application for end customers, reinforcing Mindgate's commitment to reliability and customer satisfaction.

Implementation

- » UAT production environments in the AWS Bahrain region, along with a replica setup of Production for Disaster Recovery, were setup in the AWS Ireland region.
- » Implemented a robust approach for deployments, roll backs, and database replication for all the applications.
- » Route 53 is used for hosting the primary site and the disaster recovery site handled by Mindgate and maintaining DNS configuration.
- » A combination of API gateways and lambda functions was used to authenticate the users before traffic hit the application microservices hosted on EKS clusters.
- » Aurora instances were used to host the PostgreSQL database in a multi-AZ mode.
- » Certificates are purchased from ACM to keep their websites secure, and these certificates are renewed in a timely manner.
- » A web application firewall was implemented to allow only authorised traffic to flow through and block unwanted traffic.

- » CloudWatch and CloudTrail were implemented from the monitoring suite of AWS.
- » Rapyder follows AWS best practices to maintain Identity and Access Management (IAM) users and roles.
- » 4 ALB's are maintained for the UAT, production, and DR sites.
- » Elasticache Redis for caching and Amazon-managed Kafka were set up.

Reaping Rewards

- » Hosting on AWS ensured 99.99% uptime and seamless scaling with Aurora PostgreSQL and EKS, ensuring constant high-quality service.
- » The AWS setup in Ireland reduced downtime to minutes, ensuring quick recovery during unforeseen incidents and preserving business continuity.
- » AWS's efficient model helped us reduce operational costs, enabling resource allocation for strategic initiatives and business growth.
- » Utilizing AWS security features enabled us to protect our infrastructure against cyber threats, helping us gain customer trust.

