

# Rapyder Helped 9dot9 Media to Migrate Their Infra From Singapore to Mumbai Region with a Cost-effective Approach



## Client

9 dot 9

## Industry

Media & Entertainment

## Offering

AWS Migration

## AWS Services

WAF, Elastic Load Balancer, NAT, OpenSearch, EC2 Autoscaling Groups, Aurora MySQL, ElastiCache for Redis, CodePipeline, CodeBuild, CodeDeploy, S3, CloudWatch, CloudTrail, AWS Config, Guard Duty, SES, KMS

## Introduction

9dot9 Media is an innovative content-driven company using contemporary media to empower you to change your world. We believe that success is driven by people that motivate, knowledge that empowers and learning that inspires growth. Their vision is to deliver impactful results and groom an exceptional cadre of leaders for the Indian media and entertainment industry by building innovative businesses led by the country's finest talent and to become one of India's most respected media companies, generating substantial shareholder value while producing the best leaders in the industry.

## Business Needs

The customer has developed Websites (media portal) for Digital Devices and is hosting them on AWS in the Singapore region. Applications are developed in a multi-tier architecture with the following technology stack:

- **Application Front End:** Laravel
- **CMS:** Symphony
- **API Server:** Node.js
- **Database:** MySQL

Customer is intending to migrate to the AWS Mumbai Region. Being a critical website, the customer also wanted a highly available, scalable, and resilient architecture to be implemented, keeping AWS best practices in mind.

## Below were the requirements from the customer:

1. By moving the infrastructure closer to the target audience in India, the customer aims to reduce latency and enhance the website's performance. The challenge lies in ensuring a seamless migration without any disruption to end users.
2. Customer wanted to have highly reliable and scalable Infrastructure at AWS. Customer also wanted to ensure that high availability was maintained for every component of the infrastructure.
3. To streamline the deployment process and facilitate faster releases, the customer wants to adopt a CI/CD approach. This involves automating the build, testing, and deployment processes for their Laravel and Symfony applications.
4. The customer aims to optimize their monthly AWS consumption to reduce unnecessary expenses. They need to identify areas where costs can be optimized without compromising performance and reliability.
5. Ultimately customer also wanted to optimize the overall monthly billing on AWS.



## Business Solution

Our AWS Certified Solutions Architects conducted detailed workshop sessions with the customer to understand their requirements and pain points with the existing setup. In the discovery, we also captured information about the size of the data to be migrated and affordable downtime.

AWS best practices and business continuity principles were applied and followed through the implementation, as explained below.

- Based on discussion and considering the target audience location, the Rapyder team recommended the customer migrate the Infrastructure to the AWS Mumbai Region. This will reduce the latency that customers are facing and also improve the performance of the application.
- Considering the Application's criticality and as a frontend application, API and Symphony CMS applications were supporting horizontal scaling, deployed in an auto-scaling Group spanning across Multiple Availability zones, making Infra highly available.
- RDS Aurora MySQL is also deployed in MultiAZ mode, providing Automatic failover with data redundancy.
- High availability requirements were ensured by incorporating AWS services, which support High availability and are deployed across multiple Availability zones in the Mumbai region.
- Well defined DevOps pipelines were created to automate Application deployments using AWS native DevOps services.
- To optimise the overall monthly AWS Cost, Rapyder proposed implementing AWS services like AWS Cost Explorer and AWS Budgets. By studying the Resource utilisations, Rapyder proposed to right-size the infrastructure and opt for a Reserved Instance/Savings Plan.



## Reaping Rewards

- With this solution, we provided customers with a Secure, reliable, and Scalable Infrastructure on AWS, offering High Availability.
- The customer is experiencing an impressive uptime of more than 99.95% with our resilient architecture. This includes a highly reliable infrastructure, minimized downtime, and ensuring the application's availability at an exceptional level.
- Implementing Applications into Autoscaling Groups helps manage the fluctuating demand for Resources.
- Moving the application to the AWS Mumbai Region improved the application's performance and reduced the Latency issues.
- With the DevOps pipelines, the risk of manual errors was completely removed.
- Cost optimization strategies help reduce unnecessary expenses and ensure efficient resource allocation.