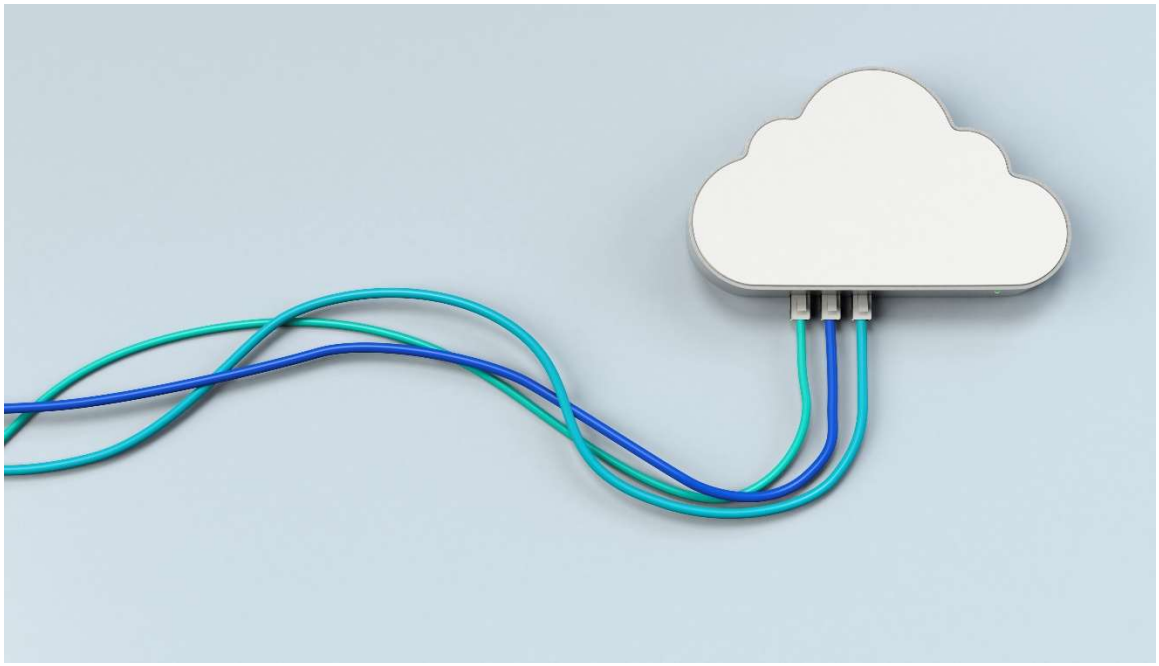

Success Story: Scalable SaaS Platform on AWS with PostgreSQL RDS & Regional Disaster Recovery

Background

The client is a fast-growing SaaS provider focused on delivering a collections management platform tailored for the financial services industry. Their B2B solution helps banks, NBFCs, and fintech companies streamline and automate their debt recovery and customer engagement processes.

With a rapidly expanding customer base across APAC and North America, the company needed to build a high-performance, multi-tenant SaaS infrastructure that could support regional resilience, data integrity, and scalability.

Their objective was to deploy a cloud-native platform on AWS that offered enterprise-grade reliability, robust disaster recovery, and minimal operational overhead—while maintaining strict compliance with data security and industry regulations.

Business Goals

- Launch a cloud-native, multi-tenant SaaS application.
- Use PostgreSQL as the core transactional database with high availability.
- Ensure automated Disaster Recovery in a different AWS region.
- Maintain compliance and data security for regulated industries.
- Achieve high performance, with easy scale-up for traffic spikes.

Challenges

- Needed an environment that supports rapid development cycles and zero downtime.
- PostgreSQL had to support transactional consistency, automated failover, and snapshot backups.
- Customers required assurance of business continuity, with <1 hour RPO and RTO.
- The client wanted to avoid managing infrastructure manually and focus on application logic.

The Solution

Tamiser Cloudworks built a scalable and resilient SaaS backend using Amazon RDS for PostgreSQL, hosted in the AWS Mumbai region, with cross-region Disaster Recovery set up in Hyderabad (ap-south-2).

Implementation Highlights

Work Area	Description
Discovery & Design	• Conducted workload analysis, database sizing, and DR policy planning. • Designed for multi-AZ high availability and multi-region failover strategy.
Architecture Deployment	• Amazon RDS for PostgreSQL : Hosted the production database with automated backups and point-in-time recovery. • Same-Region Read Replica for Reporting/Analytics • Cross-Region Read Replica for DR : Set up in Hyderabad for fast failover and reporting workloads. • Amazon EC2 & ECS: Hosted the stateless SaaS app and APIs with Auto Scaling. • Amazon S3 & EFS: Used for static content and shared assets. • Amazon Route 53: Configured with health checks and DNS-based failover for DR.
Security & Governance	• IAM policies, parameter groups, SSL enforcement on RDS connections. • CloudTrail and GuardDuty enabled for continuous audit and threat monitoring. • KMS used for encryption at rest and in transit.
Disaster Recovery	• DR Region: AWS Hyderabad region (ap-south-2). • Read replica promoted to primary in DR tests with minimal downtime. • Regular DR drills conducted with automated scripts and Route 53 updates.

Outcomes & Benefits

Metric	Value
⏱️ **Time to Deploy**	< 4 weeks for production readiness
🧠 **Resilience**	Multi-AZ HA + cross-region DR (RTO: 30 mins)
📉 **Reduced Ops Overhead**	Fully managed PostgreSQL – no DBA management
🔐 **Security & Compliance**	Aligned with CIS, GDPR, and SOC 2 best practices
📈 **Scalable Architecture**	Scale on Demand, Resilient & Future-ready

Key AWS Services Used

- **Amazon RDS for PostgreSQL** – Highly available databases
- **Amazon RDS Read Replicas** – Cross-region DR and analytics
- **Amazon EC2 & ECS** – Application servers and container orchestration
- **Amazon Route 53** – DNS failover and global routing
- **Amazon S3 / EFS** – Storage for static and shared data
- **AWS IAM, KMS, CloudTrail, GuardDuty** – Security and compliance stack
- **AWS CloudWatch & Systems Manager** – Monitoring, patching, automation

Summary

By leveraging AWS-native services and Tamiser Cloudworks' cloud architecture expertise, the client successfully launched a resilient, scalable, and fully managed SaaS platform tailored for the collections management needs of financial institutions.

The implementation not only met performance and compliance requirements but also ensured business continuity through a robust cross-region disaster recovery setup. With a future-ready infrastructure in place, the client is now well-positioned to expand globally, onboard enterprise customers with confidence, and innovate faster—without being held back by infrastructure limitations.

“Tamiser Cloudworks helped us build a SaaS platform on the cloud, that’s not only fast and reliable, but also disaster-ready. The AWS-native setup with PostgreSQL RDS and regional DR gives us confidence to serve global customers without compromise.”

— CTO, Leading Fintech SaaS Provider

About Tamiser Cloudworks

Tamiser Cloudworks enables digital-native companies to scale reliably and securely in the cloud. As an AWS consulting partner, we specialize in SaaS architecture, PostgreSQL RDS optimization, and business continuity solutions that are cost-effective and enterprise-ready. For further information contact us at reachus@tamiser.in