

slice

CASE STUDY

AWS well architected framework review and implementation



ABOUT AXCESS.IO

AXCESS.IO is a niche provider of Managed Cloud Services to businesses worldwide and has served an ever-growing number of clients since its inception. In a relatively short period, AXCESS.IO has quickly become a niche consulting firm specializing in Cloud Advisory, Cloud Managed Services, and DevOps Automation.

ABOUT SLICE

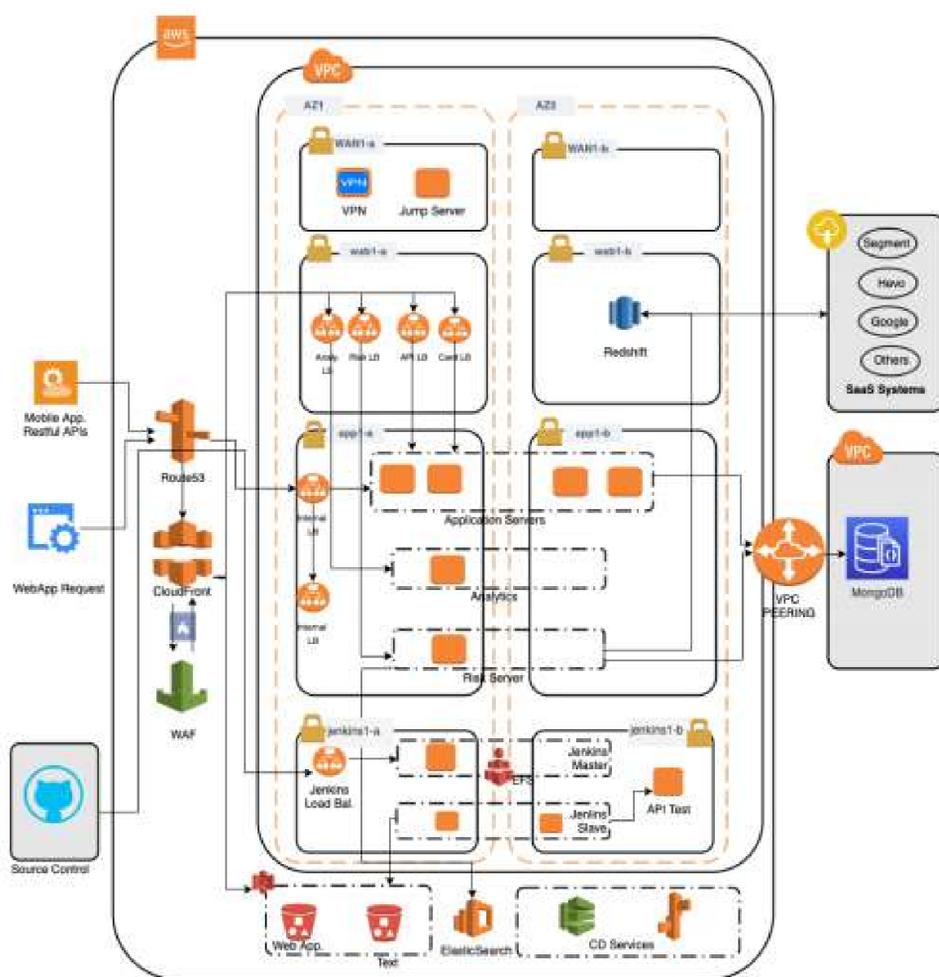
A fintech startup focusing on enhancing the financial experience of India's millennials, Slice aims to create a smart, simple, and transparent financial platform. Founded in 2015, fintech believes in combining personalization with improved customer service to build long-lasting relationships with the new generation. Slice offers an app that enables both online & offline payments across 5M+ merchants in India, catering to the demography that is not covered by traditional banks.

THE CHALLENGE

Following the AWS regulatory standards, Slice wanted to comply with the RBI guidelines to run its financial services across the country. In addition to several other requirements, the company needed to address its business continuity, information security, and performance configuration as well as security monitoring at the earliest. In terms of information security, Slice was looking forward to gaining access control, roles and responsibilities, network security, and secure remote access.

OUR SOLUTION

We audited the AWS Infrastructure against the AWS Well-Architected Framework (WAF) and implemented the following:



We implemented the following to comply with the AWS Well-Architected Framework guidelines:

- ✓ Business Continuity - Eliminated every single point of failure and performed data and deployment replication as well as set up Infrastructure as a Code.
- ✓ Information Security – Managed access control, roles and responsibilities, network security, secured remote access, key provisioning, and rotation
- ✓ Implemented AWS WAF to protect web applications from common web exploit.
- ✓ Enabled and configured performance and security monitoring.
- ✓ Implemented Jenkin based CI / CD to build and deploy releases faster.
- ✓ Implemented a Multi-AZ Jenkin server to improve the reliability of the CI infrastructure.

AWS ARCHITECTURE

The AWS Well-Architected Framework provides a consistent approach to implement a design that can scale over time. AWS provides a comprehensive set of tools to implement the guidelines of the framework.

Here are the set of tools and services used in the implementation:

COST	SECURITY	RELIABILITY	PERFORMANCE	OPERATIONAL EXCELLENCE
Autoscaling	IAM	Cloudfront	Cloud Watch	Cloud Formation
RIs	Cloud Trail	Autoscaling	Cloudfront	AWS Config
Cost Explorer	VPN	Trusted Advisor	Load Balancer	Cloud Watch
Billing Alerts	SSL		Route53 (Rule based Routing)	AWS CICD
	WAF			Systems Manager
	SSO			
	Encryption			

THE FINAL OUTCOME

Slice experienced no major outages during and after implementation with regular deployments. Many features were A/B tested on the new active pre-prod/prod setup. The system built by us succeeded in the third-party security audit with no major vulnerability findings. Monitoring infrastructure and application dashboards helped Slice proactively identifying anomalies.