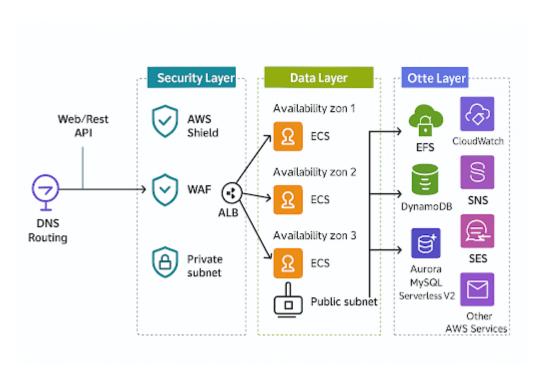


Greenfield Telecom Service Switching Platform Revolutionizing Service Migration with Cloud-Native Agility

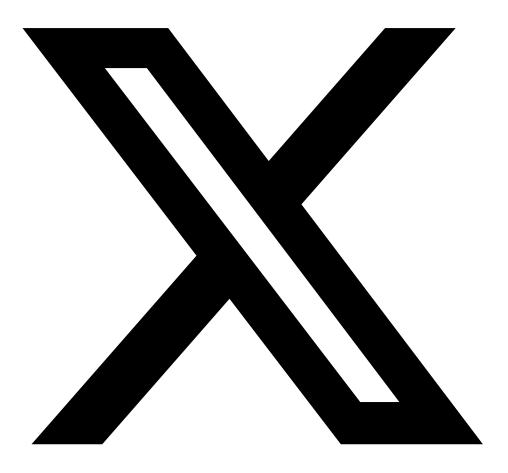
Posted on September 7, 2025 by meetkaneriya011@gmail.com



Case Study



<u>Linkedin</u> <u>X-twitter</u>



<u>Facebook</u>



Greenfield Telecom Service Switching Platform Revolutionizing Service Migration with Cloud-Native Agility

Client

A Leading telecom provider, needed a robust and future-ready system to enable seamless transitions between broadband and landline service providers without disrupting customers or operations.

This was a greenfield initiative: no legacy to refactor, but also no system to build upon. Speed, security, and scalability were non-negotiable.

That's where TechTez stepped in.

The Challenge

In the dynamic telecom landscape, portability and provider-switching workflows are often slowed by rigid systems and manual handovers.



A self-healing, resilient backend

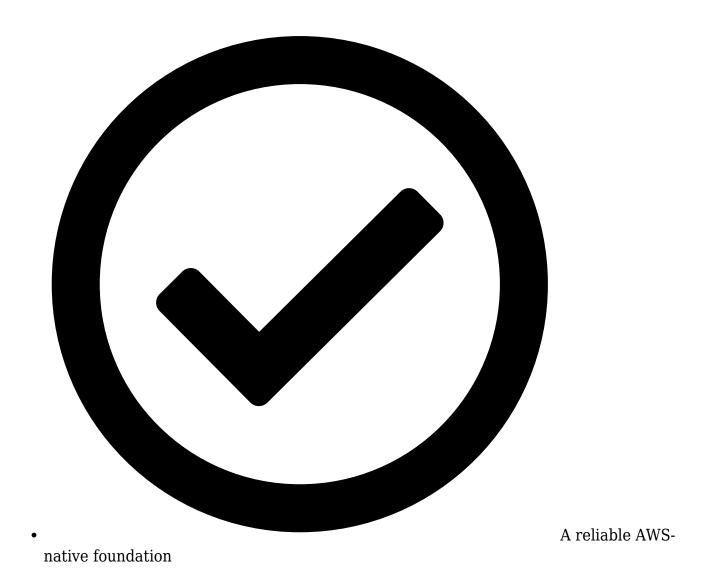


Secure and frictionless data workflows



components for future adaptability

Modular

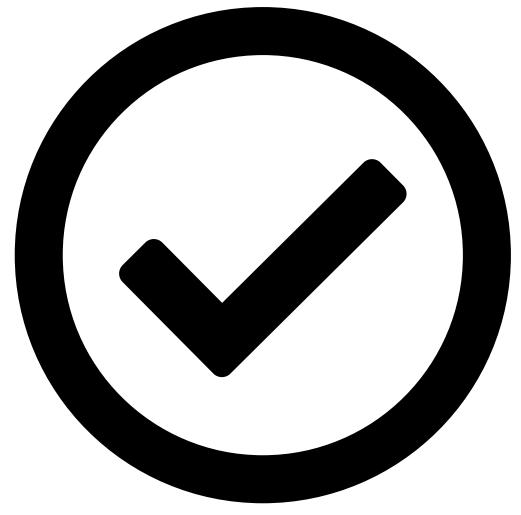


Our Strategy:

We architected and delivered an end-to-end cloud-native solution using AWS services, modern DevOps, and microservices principles. The system now handles:



 $\textbf{Switching at Scale:} Across \ regions \ and \ providers$



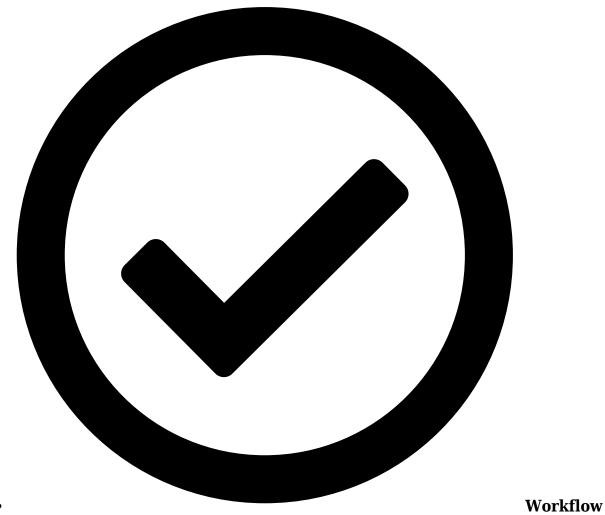
Seamless API

 $\textbf{Integration:} \ \textbf{With DNS routing, email, and SMS workflows}$



Processing: Leveraging Fargate and Lambda

Event-Driven



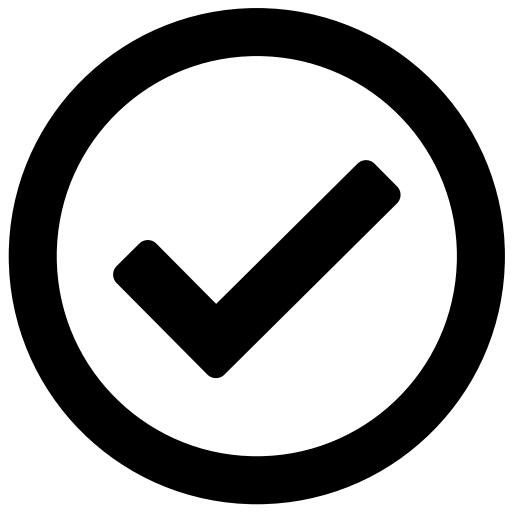
 ${\bf Orchestration:} \ {\bf Using} \ {\bf Camunda} \ {\bf BPM} \ {\bf for} \ {\bf business} \ {\bf logic}$

Tech Stack:

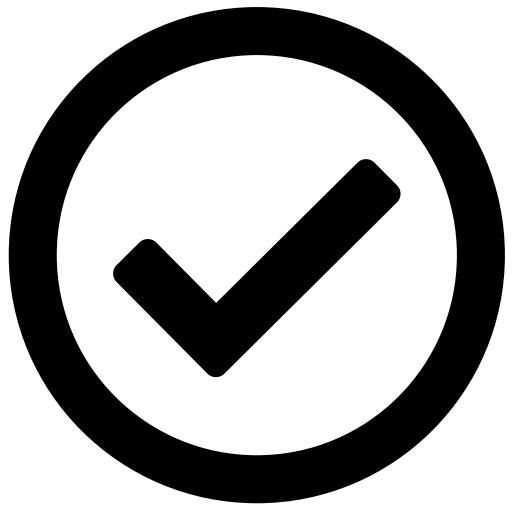


Built for Scale

& Resilience: Using Amazon ECS + Fargate across 3 availability zones, we ensured zero-downtime deployments with auto-scaling built in.



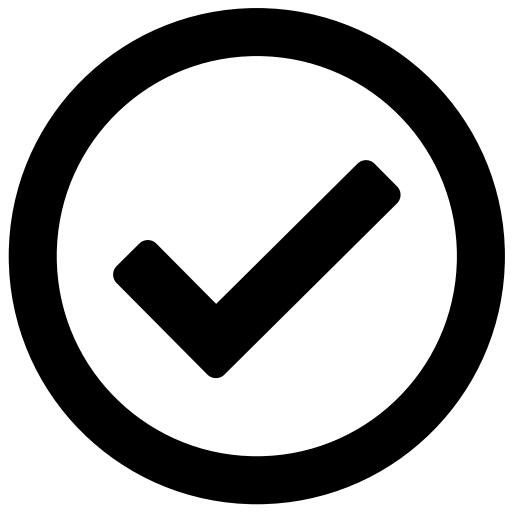
Secure by Design: AWS Shield, WAF, and parameter store manage access, policies, and secrets across services.



Workflow Management: Camunda BPM powers decision logic and stateful transitions for each switching request.



Smart Data Layer: The system leverages DynamoDB for performance and Aurora Serverless for critical persistence ensuring both speed and durability.



Async

Processing at Its Best: Apache Artemis + EFS enable durable queue management and high-throughput message delivery between distributed components.



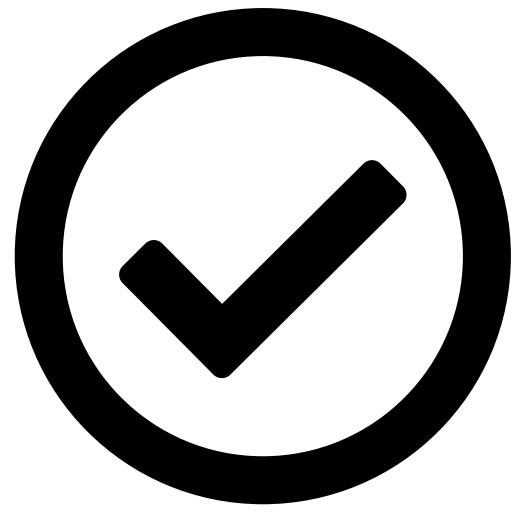
Communication Made Seamless: AWS SES/SNS allow for real-time status alerts and automated transactional messaging to users and administrators.

Impact & Results:



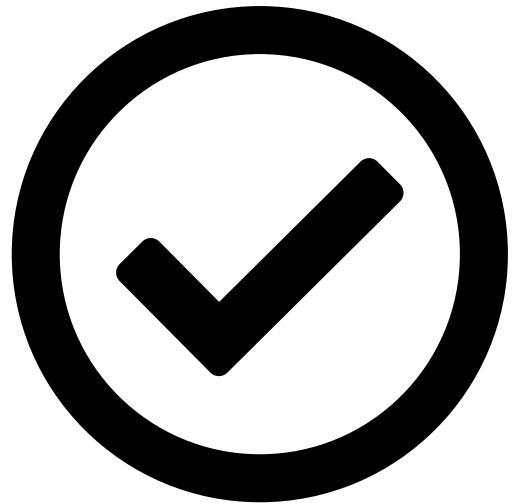
containerized platform using AWS CDK

Delivered a fully



switching request latency by over 60%

Reduced

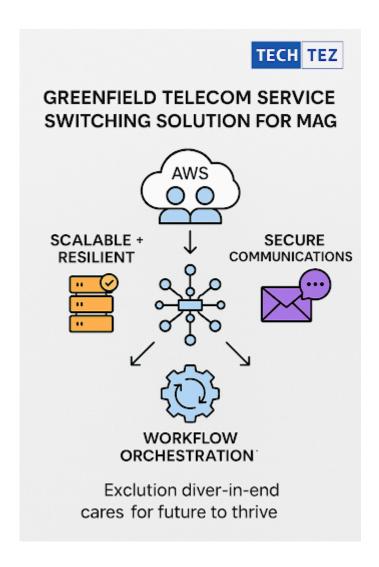


Achieved near

zero downtime during peak test simulation

We didn't just build for specs we built for intent.

With TechTez, every architecture is modular, every decision data-backed, and every sprint driven by impact, not just output.



Our Thought Leadership Guides

• Case Study

Load Testing vs. Stress Testing: Key Differences Explained

It's launch day. Thousands of users flood your app. Cart values are up. Engagement is spiking. Then





Load

Goal: steady performance
at expected traffic

Range: normal to peak

Metrics response time,
throughput, error ate

Outcomes capacity planning
SLA verification



Stress



find breaking point & recovery

Range: beyond peak until failure

Metrics degradation,

time-to-failure

Outcomes resilience, failover tuning



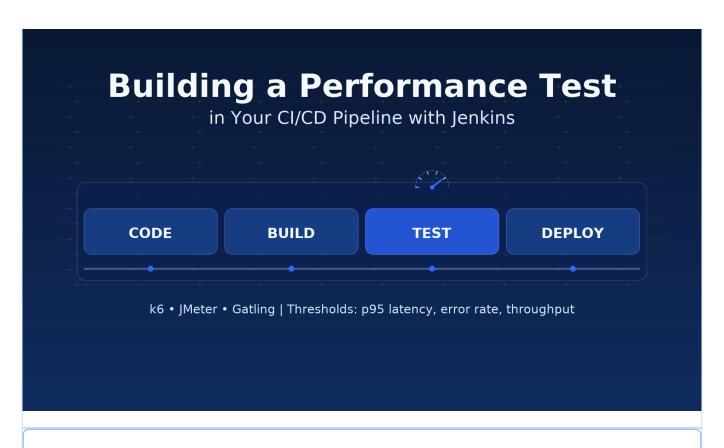




Case Study

Building a Performance Test in Your CI/CD Pipeline with Jenkins

In the world of rapid software delivery, releasing fast is no longer enough—releasing fast...



• Case Study

Conversational Chatbot Powered by Document Intelligence

A mid-sized SaaS company specializing in HR and payroll management faced a growing barrier:

