Accelerating Quality at Scale: 85% Faster Regression Testing with Cloud-Based Automation



Overview

With over 30 years of legacy and a customer base of 2.5 crore, the client is a leading nonbanking financial services provider, offering solutions across retail, rural, and infrastructure finance. To support their expanding digital ecosystem—including 10+ mobile apps and complex web platforms—they needed a scalable, efficient testing infrastructure.



Objective

The client aimed to reduce their weekly regression testing cycle from over 7 days to under 24 hours while ensuring consistent test environments across 10+ mobile applications and 5000+ automated test cases. They also sought to eliminate manual fallback and improve bug reproducibility through real device access and centralized reporting.

Business Challenges

The client faced several critical challenges in scaling and streamlining their testing operations, which directly impacted delivery timelines and quality assurance.

- Prolonged Test Cycles: Weekly regression runs stretched beyond 7 days, delaying releases
- Device Fragmentation: Limited access to specific mobile devices made it difficult to reproduce production bugs
- Environment Inconsistency: Inconsistent test setups led to frequent manual fallbacks and unreliable results
- High Maintenance Overhead: Managing physical devices and local labs demanded significant resources
- Tool Silos: Fragmented automation tools created inefficiencies across web and mobile testing workflows

The Solution

The client transitioned to a cloud-based testing infrastructure using **LambdaTest**, enabling seamless access to 3000+ browsers and real mobile devices without managing physical labs. Appium-based mobile test cases were executed on real Android and iOS devices, while web components were validated through cross-browser testing. Parallel test execution was implemented to streamline test cycles, and centralized dashboards provided detailed logs for every run. The setup was integrated with Jenkins and Azure DevOps, and a secure tunnel allowed testing of staging and internal environments.

Value Delivered

By integrating **LambdaTest's** cloud-based testing infrastructure with **Tricentis Tosca**, the client significantly enhanced their testing efficiency, reduced costs, and improved overall quality. The solution not only streamlined the testing process but also helped eliminate manual fallback and speed up bug reproduction. Here's how the transformation played out:



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