

Marketing

Case Study

Automation E2E Testing

Client Overview

ActionIQ is a composable Customer Data Platform (CDP) designed for enterprise brands to accelerate growth and deliver personalized customer experiences. It empowers marketers, analysts, and technologists by unifying customer data, enabling insightful analytics, and integrating seamlessly with marketing ecosystems —filling the gaps left by traditional marketing clouds.

With ActionIQ, enterprises can:

- Scale to manage any volume of customer data.
- Capture, analyze, and activate data to build and launch marketing campaigns without IT dependencies.
- Provide marketers with the freedom, speed, and agility to deliver meaningful, data-driven experiences.

Project Overview

- The client faced challenges as only the Stage environment was initially available, making it difficult to prepare and validate automation scripts consistently. QA processes also lacked visibility, with dependencies on a single person for deployments and limited test coverage due to resource constraints.
- We implemented a dedicated Previs environment available throughout the week, enabling smoother test automation. The QA team took ownership of deployments, segregated automated vs. manual test cases in TestRail, and adopted weekly customer/module shuffling to maximize coverage.
- The engagement focused on Automation Development, includes UI automation, and data validation. Additionally, process improvements such as environment setup, deployment ownership, and test coverage optimization were delivered.

Key Deliverables

- **Designed and implemented** a scalable **Java-Selenium automation framework** tailored to client requirements.
- **Automated end-to-end test cases** for 25 enterprise customers across different modules.
- **Created reusable scripts** for UI testing, API validation, data handling, and notifications.
- **Integrated test execution** with reporting tools to provide transparency on automation coverage.
- A **robust automation framework** capable of handling multiple customer workflows.
- **Automated regression test suites** covering customers like AEO, Michael Kors, NYTimes, Shopify, and more.
- **Execution reports** and **TestRail updates** segregating automated vs. manual test cases.
- **Deployment-ready scripts** that reduce manual effort and accelerate release validation.
- **Quality Assurance (QA)**: Functional, regression, and cross-customer validation.

- Test Automation Development: Framework creation, script development, and execution.
- Process Optimization: Test case management, customer coverage tracking, and reporting.

Technologies / Tools Used

TestRail, Jira, GitHub, Java, Selenium

- Utilized engineering best-practice tools such as GitHub, TestRail, and Jira for version control, test management, and defect tracking.
- Provided resolutions for issues identified during Jenkins pipeline executions, ensuring stable automation runs.
- Executed and validated automation scripts in Jenkins, confirming successful and reliable execution as expected.

Impact / Results

- Reduced manual testing effort significantly by automating regression suites across 25+ customers, accelerating release validation cycles.
- Improved efficiency and maintainability with a reusable Java-Selenium framework, cutting down repetitive scripting and reducing dependency on manual QA.
- Enhanced transparency and collaboration through GitHub (version control), TestRail (test case segregation), and Jira (release tracking).
- Increased reliability of deployments by integrating automation with Jenkins, ensuring consistent execution and faster defect detection.
- Overall, the client benefited from faster time-to-market, reduced risk of defects in production, and higher confidence in release quality.

T H A N K Y O U



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