Jeavio

Case Study

UNLEASHING QUALITY AND SPEED WITH NEXT-GEN QA AUTOMATION

The Challenge

Breaking Through Manual Testing Bottlenecks

The client's product—a leading observability and network performance platform—was used daily by Network Operations Center (NOC) engineers at global enterprises.

As the platform evolved, manual testing became the single biggest constraint.

The need for a scalable, efficient, and future-ready QA strategy was clear.

- Manual UI regression required 7-8 engineers working two weeks per sprint, slowing down releases.
- Complex, modern UI (with dynamic reports and widgets) made traditional automation difficult and error-prone.
- Compatibility testing across multiple platforms and versions was tedious and inconsistent.
- Manual performance testing suffered from limited real-world data, missing critical edge cases.
- Slow, late-cycle bug detection due to lack of integrated automation in continuous integration.

Jeavio's Approach

Unconstrained. Fluid. Human.

Unconstrained

Jeavio went beyond standard frameworks, evaluating and implementing best-fit tools for every challenge. We initially used Selenium, then adopted Playwright for superior speed and parallel execution—drastically reducing time-to-test for complex UI scenarios.

Fluid

Our agile team embedded automation early ("shift left") in the development lifecycle, integrating smoke tests and continuous feedback directly into each build. We also automated compatibility testing and data collection for system stability, ensuring QA kept pace with rapid sprints

Human

We partnered closely with the client's engineering and QA leaders, building simulators and traffic generators to deliver realistic, actionable test data. Our approach prioritized transparency, knowledge sharing, and a relentless focus on enabling the client's teams to move faster with confidence.

Technical Highlights

Playwright and Selenium Automation: Parallel execution cut UI regression from 70 FTE days (manual) to just 1 hour (Playwright).

Simulators & Traffic Generators: Provided realistic, scalable test data to catch performance bottlenecks and edge cases early.

Shift-Left Smoke Tests: Triggered on every code commit, catching launch failures and bugs as soon as they appear.

Automated System Monitoring: Continuous collection and reporting on CPU, memory, and network stability, integrated with Jenkins for real-time insights.

Cross-Platform, Cross-Browser Testing: Automated, scheduled runs covering all major environments—minimizing risk and manual labor.

Outcomes

Quality, Speed, and Competitive Edge

Time-to-Test Cut from Weeks to Hours: Automated regression now fits within every sprint, enabling faster, more reliable releases.

Early Bug Detection: Continuous integration with automated smoke tests means issues are found—and fixed—earlier than ever.

Improved Platform Stability: Real-time monitoring and automated reporting empowers teams to proactively address potential issues.

Broader Coverage, Less Manual Effort: Comprehensive compatibility and performance testing now runs on autopilot, freeing teams to focus on feature innovation.

Sustainable Quality Culture: QA automation now enables the client's engineering org to scale and ship new features without sacrificing reliability.

Why It Matters

This project highlights Jeavio's unique blend of technical depth and human partnership:

- **Unconstrained:** We challenge tool and process limitations, always seeking the best fit for client needs.
- **Fluid:** We integrate seamlessly into agile environments, adapting our approach as client priorities evolve.
- **Human:** We empower teams, embed knowledge, and deliver results that last—enabling our clients to lead in their markets.