



A leading Insurance Agent (MGA) achieves 75% test coverage with Test Automation

Summary

Upgrading a live, operational financial services system with real-time data is a complex task fraught with risks. A leading insurance company, in partnership with Trigent's QA & testing team, successfully rolled out a significant upgrade to its web application on the back of a robust Test Automation process.

Technology Stack



About the client

The client is one of the largest Managing General Agents (MGA) in the US, an intermediary between an insured and the insurance company. Their expertise involves crafting unique insurance coverage based on special risk assessments and specific coverage needs of their clients. Their web application is used for complex calculations involving underwriting risks, claims and policy issuance, and generating reports for regulatory compliance.

Business challenges and complexities

- Legacy VB6.0 server application needed to retire to welcome modern intranet web app with smoother navigation and enhanced features
- Testing of high volumes of sensitive data migrated from desktop to web application. Each module contained high-level features with complex policy calculations that had to be handled carefully
- The application is tightly coupled with multiple players incorporated in a single screen – market, product, agent, contracts, inspectors, state tax and fee, terrorism, etc., that demanded testing from each perspective
- Feature changes and Regression Testing – As the insurance policies were live, any small feature change had the risk of causing a major financial impact on the client and the end-consumer

Trigent solution

Trigent's experience in the insurance domain, understanding of the client's business model, and expertise in QA processes equipped them in effectively migrating massive sensitive data with Test Automation. Data integrity was ensured at every stage of the transition. The web application and portal were developed using Angular.

- Over 2000+ test cases across 60+ transaction screens were designed and executed resulting in maximum test coverage.
- Cross-browser testing and compatibility testing analyzed the behavior of the website on Edge, Chrome, and Firefox.
- Over 35% of the test cases are fully automated, with a roadmap to further automate up to 65%. At every stage, the team was careful not to disrupt the already existing modules.
- Understanding the business flow was integral to testing. The application is localized to comply with state and county regulations. Changes could affect state taxes and fees applied to each location.
- The team ensured end-to-end testing of modules. Each module had complex dependencies and multiple validations that had to be reflected in the back-end as part of the monthly, quarterly, and yearly reports. As there were financial implications at every step, the QA team ensured high accuracy and security of data.

“Trigent met each challenge that came across their way. With Test Automation we benefited from accelerated product releases, seamless migration, and smoother function of the web application. We’re happy with the results we’ve seen so far.”

Client Benefits

- Significant reduction in test cycle time - From **1 week to half-a-day**
- Improved **test coverage by 75%** with Test Automation
- Accelerated release velocity as a result of expedited testing
- Time to market for new features **down by 50%**
- Lowered **Defect Escape Ratio (DER) to 0.3**
- Maintained data integrity throughout Regression Testing
- Helped client to focus more on testing of newly developed features without worrying about repetitive regression testing of existing features

About Trigent

Trigent is an early pioneer in IT outsourcing and offshore software development business. We enable organizations to adopt digital processes and customer engagement models to achieve outstanding results and end-user experience. We help clients achieve this through enterprise-wide digital transformation, modernization, and optimization of their IT environment. Our decades of experience, deep domain knowledge, and technology expertise delivers transformational solutions to ISVs, enterprises, and SMBs.

We offer end to end consulting services, design, development and managed services across Infrastructure, Cloud, Mobility, BI, Analytics, Product Engineering, QA & Testing, IoT, Big Data, and Artificial Intelligence.