Application:
Web based retail application suite

Services Offered:

Tools:
Test management: ALM | Functional Testing: UFT, HP QTP | ADA Testing – JAWS | Performance testing tool: Load Runner | Quality Centre | Selenium

Key Highlights
Key Success:
Reduced test execution time by 66% | Provided 100% coverage of regression test automation using our customizable iSAFE framework

Domain:
Retail

Duration:
80 weeks

QA Team:
20+

Technology:
Java, IBM Web Sphere, Oracle 11g & Distributed Order Management / Warehouse Management

Client
The largest specialty retailer of men's suits and the largest provider of tuxedo rental product in the U.S

Application Overview
A web-based retail application suite including POS, e-Commerce, Custom Application, Warehouse Management and Logistics.
**1 Business Challenges**
- Client faced challenge in automating barcode reader and Promotion systems
- During promotions, their website crashes due to sudden spike in traffic which impacts their sales.
- Checking 400+ products in production environment on daily basis to ensure the pages are not broken (this may directly affect the business)
- No automation done in PoS application and the testing was completely manual

**2 Testing Challenges**
- Lack of time to execute regression test suite
- Challenges in measuring the test coverage / effectiveness

**3 Requirement**
- Validate four web based retail applications: PoS, e-commerce, Warehouse management, and Logistics to ensure stability under different load
- Identify and automate test scenarios of the “Online Retail PoS”
- Automate the process of barcode scanning and validate the promotional activities through automated script execution
- On-demand QA to execute regression suite
- Measure test coverage and effectiveness

**4 Our Approach**
- Thorough understanding of application’s functionality with respect to transaction flows and detailed KT Session
- Develop scripting using HP QTP scripts using Hybrid test driven approach
- Convert test cases into automation test scripts and maintain the centralized test repository in HP QC and execute the scripts in batch mode
- Provided framework level script execution training to Client end QA engineers

**5 Our Solution**
- Adopted hybrid driven approach to achieve automated test execution in multiple brands
- Customized iSAFE – Test Automation Framework according to the requirement Performed exploratory testing for application flow
- Integration validation of application to verify compatibility issues
- Implemented Load Balancer method that distributed application traffic across servers
- Performed load testing of two retail web application & Mobile application for 1500 concurrent users
- Built 300 effective automated reusable test functions
- Automated Validation of the business critical scenarios in multiple browsers / multiple devices including iOS and Android OS. This is done in production environment on daily basis
- Performed compliance check on Web Content Accessibility Guidelines (WCAG) 2.0

If a **reliable & robust** framework is what you have in mind, be sure to check out Indium Software’s Test Automation Services.
Client Testimonial

“I want to thank your team for their efforts and the hard work that they have put in on the Point-of-Sale automation project. It made the Point-of-Sale project a success to this point and has positioned it to be able to continue to be a success as we added new features and functionality.

I especially appreciate your team for creating the new Controller spreadsheet that gives us control at the Java POS feature level and flexibility in being able to add additionalTestData and SuiteData spreadsheets without having to edit, save, rename... spreadsheets.”

– Lead QA Analyst - Java POS

Metrics

» 200 critical business scenarios were automated
» 900+ defects were found out of which 160 were show stoppers

Our Value Adds

» Increased user base by making the application comply with Web Content Accessibility Guidelines (WCAG) 2.0
» Achieved 99% DRE (Defect Removal Efficiency) in every production release
» Provided 100% coverage of regression test automation using our customizable iSAFE framework