Maintaining a superior customer experience with test automation
Partners Life is a leading provider of health and life insurance in New Zealand. With a focus on protecting Kiwi families and businesses, Partners Life strives to reduce the stress caused by ill health and death by resolving claims quickly and without hassle.

A critical aspect in maintaining its superior customer experience is the ongoing development and maintenance of the company’s PASS quoting system. Recognizing that underpinning this process is robust technology, Partners Life would enlist its senior management team to test PASS each time an update was released.

The key to great customer service is robust technology
The process of testing each PASS release was informal, unstructured and time-consuming. Testing was focused on the changes being introduced rather than a regression test of existing functionality, which included an interface with the client’s Sonata back end system. This meant that a large volume of regression defects introduced as a result of the changes went undetected.

Furthermore, while it was important to have sign off from the leadership team to retain the integrity of the customer experience, having senior business leaders testing software was not a good use of their time or skill sets.

“The complexity of the system and the granularity of these bugs was impossible to ‘flesh-out’ with manual testing processes, let alone achieving the sheer volume of testing required in the project timeframe. A manual equivalent effort of 5.5 minutes would be required each time one of these tests was run, which equated to 16 years of manual effort at a total cost of approximately NZ$1,700,000.” — Peter Lassen, Partners Life CIO

Partners Life had developed a spreadsheet to calculate limits and quotes that would be used as a basis for testing the software releases. This document was effectively the functional specification for the calculations within the product and contained hundreds of examples.

TTC undertook a two-week proof of concept using Tricentis Tosca to automate testing these limits. Tosca is the world’s #1 continuous testing platform that accelerates testing with a low/no code approach. It combines advanced test automation for over 150 technologies with open source testing tools to rapidly construct, stabilize and execute resilient end-to-end tests.

Following the proof of concept, a three-month pilot was initiated, which involved the build of an expansive test suite within Tosca by the TTC team. While the primary purpose of TTC’s engagement was to build automated test cases, a pre-requisite was to perform static testing of the specification (spreadsheet), which led to a number of improvements in its design. Once TTC had proven the stability of the spreadsheet with testing, it could be replaced by Tosca, which was pointed directly at Sonata web services as the source of truth.

In parallel, TTC developed automated test cases for the Quotes UI covering ‘Occupation’ and ‘Products’.

“TTC developed a core capability initiative that kept pace with the increasing complexity of our systems. It benefited the company by providing more robust, reliable, accurate and efficient testing across our core platforms, which was extremely difficult to achieve through manual testing methods.” — Peter Lassen, Partners Life CIO
The test automation TTC implemented at Partners Life has increased coverage significantly with a large variation of inputs determining expected outcomes.

Substantial efficiency gains have also been made via the client’s ability to now run regression testing across the entire spreadsheet in a matter of days rather than years for any changes in the PASS software, regardless of size.

<table>
<thead>
<tr>
<th>Test focus</th>
<th>No. of test cases</th>
<th>Manual testing</th>
<th>Test automation with Tosca</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation</td>
<td>62,000</td>
<td>15.8 years</td>
<td>5 weeks</td>
</tr>
<tr>
<td>Product</td>
<td>2,490</td>
<td>23 weeks</td>
<td>1.7 days</td>
</tr>
<tr>
<td>Limits</td>
<td>1,500</td>
<td>4 weeks</td>
<td>1.5 days</td>
</tr>
</tbody>
</table>

“*The PASS Quote system required 66,000 individual test cases. This set of 66,000 test cases was run 4 times leading up to the PASS Quote release (a total of 264,000 individual tests). Post PASS Quote release we have had to run 19,500 individual tests for regression purposes. Hundreds of ‘severe’ status bugs were resolved as a direct result of the automated testing implemented by TTC.*"

— Peter Lassen, Partners Life CIO

Visibility and awareness of releases and configuration changes has increased as well as management of environments due to the infrastructure automation framework now in place. Consequently, the level of confidence and reassurance around software changes is very high.

Let’s talk

For more information, talk to a member of our team today.