


Enhanced Automation Framework Delivers Business Outcomes



STAG evaluates a hybrid keyword-driven automation framework and enhances it for better outcomes to meet the current and future automation needs of one of the largest general insurers in the UK.

 Domain - Insurance

 Technology - VBScript
Tools - HP Quick Test Professional,
QualityCenter

CUSTOMER AND PRODUCT BACKGROUND

The customer is the offshore facility and captive unit of a Fortune 20 company, which happens to be one of the largest general insurers in the UK.

The product is a suite developed using different technologies like Web, Mainframe, and Oracle forms.

PROBLEM STATEMENT

The customer planned to build a hybrid keyword-driven automation framework to automate their applications built on Web, Mainframe, and Oracle technologies and also ensure extendability to handle future automation needs. To address this requirement, the customer was looking to partner with a third party expert to evaluate their existing automation framework against industry standards and make recommendations to ensure that the framework was scalable and maintainable.

SOLUTION

The STAG team first evaluated the current automation framework for key automation parameters like usability, maintainability, scalability, recovery/error handling, and support for integration, using HP Mercury QualityCenter, a test management tool. At the end of this exercise, the team was able to prepare a detailed gap analysis report, which it then shared with the customer.

As part of its recommendations, the team suggested separating the object information using the VBScript ADODB implementation to address the concerns of ease of use and maintainability. The issue of scalability was solved by developing a multi-engine approach for the Web, Oracle, and Mainframe technologies. The team also recommended a mechanism to map every test script to existing test cases using QC to solve the issues related to QTP-QC integration. Another recommendation was the use of a multi-level recovery mechanism at the various levels of suite, test case, and method to provide robust automation.

The STAG team also developed smart workarounds to support multiple technologies with the same framework, fix performance issues in the code, and integrate QTP with QC.

Issues related to detailed reporting and attaching of error snapshots to the QTP report were resolved by exploiting the QTP reporting to support both local and QC runs. The new object layer and QC/QTP implementation resulted in a noticeable increase in the performance for QC-based runs against the local automation runs, by approximately 15%.

OUTCOME AND VALUE ADDITIONS

The STAG team implemented many workarounds to support multiple technologies, improve performance, ensure improvement in the usability aspects of the keyword driver framework, and help the customer adopt the best practices for automation.



Performance Metrics

- Code initialization time was reduced by 30-45 seconds



Code-level Metrics

- Framework engine code reduced from 1150 to 955
- Project specific code reduced from 100 to 80



Reporting

- Every run session now takes less than 5 seconds to generate a report; the report is generated directly as a QTP report