CASE STUDY

Selecting the Automation Tool Wisely

STAG's viable cost-effective test automation solution for the clinical Supply Chain product of a leading pharmaceutical services company not only salvages a dead investment on the legacy automation tool but also enables on-time product rollout to market.

Domain - Pharmaceutical

Technology - Web, Oracle Forms
Tools - HP Quick Test Professional

CUSTOMER AND PRODUCT BACKGROUND

The customer is a leading pharmaceutical services company providing the most complete set of integrated early to mid-phase drug development solutions.

The company has a clinical supply chain product with automated Oracle forms deployed on the Web.

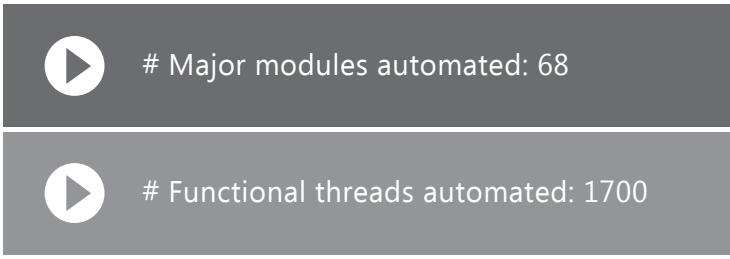
PROBLEM STATEMENT

Market dynamics were forcing the customer to add more features to the product, thereby increasing product complexity. Besides, the regression cycle time was not satisfactory and this impacted the customer's go-to market plan.

The challenge was to automate the Oracle Forms based web application and improve the regression cycle time. The customer had invested in the WinRunner tool on the recommendation of their earlier QA consultant. However, the tool failed to deliver the expected results and ended up as a dead investment, which impacted the customer deeply. The customer then began looking for an expert to help them with a cost effective automated solution that included identification of a suitable tool to automate the Oracle forms and also suggest scalable and maintainable automation architecture.

SOLUTION

The STAG team evaluated a range of functional automation tools and finally identified QTP as the best option for automating the Oracle forms application. The team conducted an initial feasibility study to demonstrate the capability of the tool. The existing automation artifacts were then assessed to identify suitable candidates for automation, ones that would give the best ROI. After the initial assessment and interaction with the customer team, 1700 functional threads were identified.



The STAG team developed a hybrid factory-based architecture to address the issues of application complexity and size. Development principles of usability, reusability, maintainability, and scalability were built into the architecture to enable quicker and effective generation of automated scripts, which in turn ensured higher productivity in terms of script development.

The team also developed key reusable components for UI test object navigation, automatic object repository, and loading of data from the UI for the Oracle database, along with reusable application business validation components. Automated scripts were built using these libraries and by applying the best practices of development, including coding conventions and robust documentation. Finally, the certified code was version-controlled.

The team also developed an automated data loader designed for uninterrupted runs of 48+ hours. Implementation of this high volume data loading functionality resulted in a 70% reduction in manual effort.

OUTCOME AND VALUE ADDITIONS

The STAG team was able to put in place a well-defined and disciplined automation process. It ensured the availability of reusable components for Oracle object navigation, data loading from UI to the Oracle database, reporting, object repository conversion, suite recovery components, and also for the application business functionality components.

STAG salvaged the customer's dead investment on the legacy automation tool and also debugged and fixed all existing issues, which enabled high-confidence product rollout to market as per business plan.

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