DATA SHEET

Higher Performance | Better Software Quality | Faster Time to Market



CONFORMIQ AUTOMATIQ

Test Automation Simplified

OVERVIEW

The push to automate more of the software testing process continues across the testing industry but testing still includes a significant amount of manual activity. This is an obvious target for applying AI. In the past few years AI has been applied in a variety of areas of software testing to improve efficiency and quality but the biggest challenge today remains how to traverse the path from manual to automation without blowing your budget and timeline.

Conformiq has an answer by providing a sophisticated and comprehensive automated test script generation solution that employs AI technology process in a new way. Conformiq AutomatIQ software leverages Artificial Intelligence to convert manual tests specified in Excel files or test plans specified in test management/ALM tools without modeling, directly into automated test execution scripts. AutomatIQ automatically transforms manual and generated test steps into a format suitable for automatic test execution including all the code needed to bind the test cases to the targeted execution framework.

CURRENT CHALLENGES



Speed

- Legacy manual tests need significant script development to automate execution
- Manually written tests for current testing are widely used and need script development
- Test automation engineers are unable to keep up with the automation backlog
- · Manual test processes interrupt continuous testing



Quality

- · Adopting the right test strategy for now and the future
- Transformation to Agile/DevOps and Digitization needs an improved test approach for better software quality
- Test automation is limited to only test execution



Cost

- Writing automation scripts is expensive
- · Insufficient numbers of trained or skilled test engineers
- Presence of multiple independent tools which need high maintenance and
- manual intervention
- · Test automation re-use and script maintenance

THE SOLUTION

Conformiq AutomatIQ is a non-intrusive AI technology based software that can be trained by users to derive automation code/scripts automatically from existing test assets, automation assets, test strategies, test data, application user interfaces, and automated test design tools.

With Conformiq AutomatIQ users can customize, extend, and maintain generation of automation script actions by teaching the AI engine. This learning assists and accelerates automation of the scripting process by processing test assets produced by business analysts and manual testers into code ready for automatic test execution. Conformiq AutomatIQ's readers normalize input by removing the external noise and identifying the automation data and objects automatically. Then, leveraging NLP technology, the engine optimizes initial inputs before transforming tests for automation.

Conformiq AutomatIQ uses text phrases to automate action mappings specified in the AI engine's NLP file to translate the manual tests into scripts in the target automation language. During the initial use it uses the default and pre-set configuration shipped with the product. Users can then modify, refine, or extend these mappings for their needs (i.e., train the AI engine) to influence the conversion further and provide the modified file as an input to Conformiq AutomatIQ for script generation.

Conformiq AutomatIQ simplifies test automation in 3 easy steps:

- 1. Reads manual tests from existing and new assets
- 2. Performs automatic assessment and basic test optimization
- 3. Generates test scripts and all the necessary code for automated test execution

TOOLS SUPPORTED



Existing Assets

- · Manual Tests in Excel formats
- · Micro Focus ALM test plans
- · Additional integrations can be made available



Test Execution

- · IUnit with Selenium Java
- · Junit with Cucumber Selenium Java
- · HCL OneTest
- XMI
- · Additional integrations can be made available

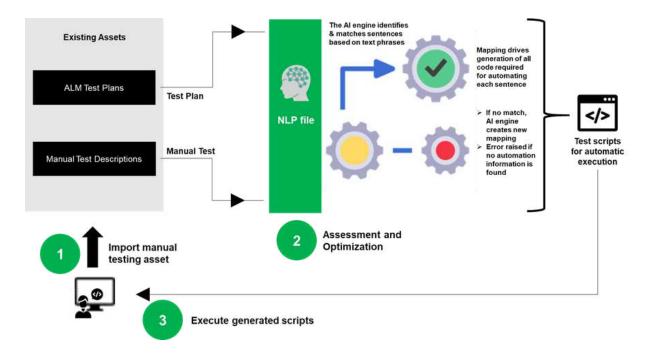


Figure 1. AutomatIQ workflow

AUTOMATIQ AND CREATOR

Many testers are already familiar with Conformiq's automated test generation tool Creator and might wonder if AutomatIQ and Creator conflict with each other. The answer is no. They are focused on different testing situations. If automatic optimized new test design using graphical models for known SUT coverage for automated execution is what the tester is looking for then Creator is the right tool to use. However, if the tester has the need to just quickly automate already existing/designed tests or prefers to continue manually writing test cases, then AutomatIQ is the right tool to use. As both tools deliver huge productivity gains and no company has a single testing process and need, AutomatIQ and Creator each fill a need not covered by the other.

BENEFITS

- Enables test engineers to shift left via automatic test script creation resulting in faster time-tomarket with improved test quality
- Effectively producing automation code and integrating smoothly into the automated execution environment
- · Building test execution assets faster and easier