

A leading global Healthcare provider achieved 50% efficiency gains for ARIS processes by adopting Intelligent Test Design solution

Business Objectives:

The client wanted to drastically improve the product quality and efficiency through Shift Left approach. They wanted to subsequently increase the automation adoption to reduce effort and time on end-to-end testing.

The main business objectives were:

- Improve Product Quality
- Improve Customer Satisfaction
- Reduce Cycle Time
- Lower Cost of Operations

About the client:

The client is a tier 1 global health services company headquartered in the United States with over 125,000 employees.

CLIENT CHALLENGES

The client was faced with major challenges in the area of the Test Design automation which was the main hindrance in achieving faster to market.

Some of the challenges are listed below:

- Inefficient and inconsistent test design approach across applications; lack of standardization in step details - resulting in testing time lags, ineffective test reviews, defect seepage, and dependency on high cost resources
- Less than expected regression automation caused by significant effort to select then current tests to execute subset of regression suite - resulted in defects seeping into production impacting production stability and customer experience
- Significant effort and SME dependency in creating test cases which was a manual process
- Dependency on availability of interfacing applications resulted in delays in test execution
- No integrated view of test execution progress across applications and programs

APPROACH

The client's need to improve end-to-end testing meant transforming their current Testing through next gen testing solutions. Hence, they decided to adopt Conformiq's Intelligent Test Design solution not only for Test Automation & Optimization but also for standardization testing through streamlined reviews, defect seepage and reducing dependency on high skilled resources.

The client was using ARIS* Professional for their graphical diagrams for certain projects and the flow of the application and enhancements was understood by legacy diagrams. These existing assets (application flows) could be used as an input for test generation, speeding test modeling process.



SOLUTION

Conformiq deployed Creator™, an Intelligent Test Design solution in the client environment for automatic design and generation of test scripts for execution. The first and foremost step for Conformiq was to quickly create ARIS diagram importer to read and identify the existing business flows. Leveraging Creator's open APIs, Conformiq was able to create and deliver this task within two weeks.

Using this importer, the client's ARIS BPM/EPC (Event driven Process Chain) diagrams were automatically converted with XML as the source file into Creator model files for both Activity and Structure Diagrams. To minimize conversion errors in the generated diagrams, Conformiq used Creator's "Quick Fix" functionality to automatically fix warnings regarding layout issues that appeared in the "Problems" view window. Additionally, for diagrams that were converted into poorly organized views, Conformiq leveraged Creator's "Arrange Diagrams" auto layout feature to improve the layout view.

Conformiq included the ARIS automated converter into its Creator user interface as an additional importer and included several conversion options.

Once the ARIS diagrams were imported and the generated Creator models refined, the test cases, test coverage and requirements traceability reports, and the executable test scripts with test validations were automatically generated. The scripts were then directly executed in the client's Selenium-based test automation framework without need to manually massage the scripts or script the test execution.

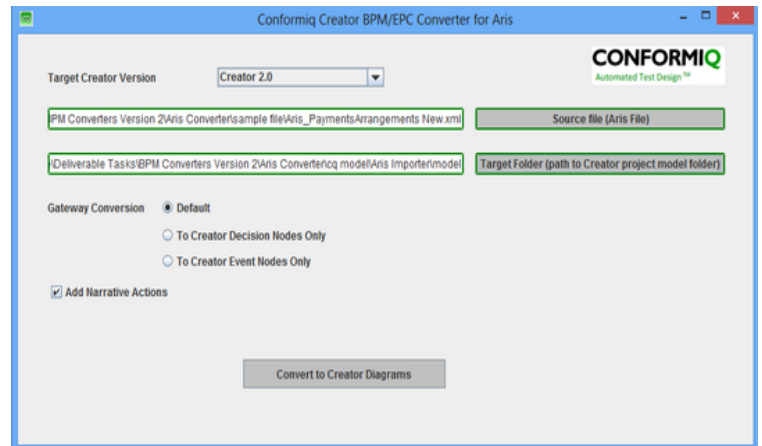


Fig 1: Creator ARIS diagram conversion window

CLIENT BENEFITS

Through this test design automation solution and optimization initiative, the client was able to dramatically reduce their end-to-end testing effort. A significant portion of this efficiency gain came from the reduced time to create models for automatic test case generation.

The client's ARIS diagrams for this project contained sufficient information to achieve a 50% efficiency gain over the estimated equivalent manual model creation time from scratch.

Some of the other benefits realized are:

- Low maintenance cost of automated regression test cases with traceability matrix
- Increased progressive test automation - resulted in accelerated test execution and defects detection
- Less dependency and lower cost incurred on the highly skilled resources
- Standardized automation framework object/keyword libraries, resulting in low maintenance cost of automation frameworks
- Quicker test design processes to implement continuous testing