



## Case Study

A leading information technology and software company sought assistance in creating implementation strategy for test automation

### Client:

A Leading Information Technology and Software Company

### Industry:

Aerospace

### Service Offering:

#### Component Services

- Application Services
- Quality Assurance & Testing
  - Automation Proof of Concept (APOC)
  - Automation Implementation Program (AIP)



**The Situation:** A leading provider of commercial, off-the-shelf software to national security and aerospace professionals sought assistance in determining the feasibility of, and optimal implementation strategy for, test automation.

**The Challenge:** The client's product line was developed with aggressive release cycles. The number, complexity, and frequency of releases created testing resource constraints, thereby impacting test coverage and testing efficiency.

**The Response:** TEKsystems®, a leading provider of technology staffing and services, responded through its QA & Testing Center of Excellence with a multi-phase program incorporating their Automated Proof of Concept (APOC) and Automation Implementation Program (AIP) services.

The project was conducted in two main phases. During the first phase, APOC, TEKsystems designed, executed, and assessed a test automation pilot program using two leading testing tools that were selected for the client's unique and specific automation requirements. This phase also included a detailed Viability Assessment of specific features of each tool, an assessment of the client's QA and QA-related SDLC processes as they relate to successful test automation, and the identification of obstacles and solutions related to test automation. Final recommendations included selection of the optimal test automation tool, as well as projected ROI of automation over manual test execution.

The following phase, AIP, included multiple steps. TEKsystems worked to develop a robust, configurable, scalable Test Automation Framework and associated utilities. In addition, the AIP phase consisted of the development of Regression Test Suites built upon the framework, process improvements impacting the efficiency and effectiveness of test automation, as well as training, mentoring, and the creation of supporting documentation.

TEKsystems' QA & Testing Center of Excellence Office of QA managed the various phases of this project. The APOC and AIP were conducted by one of TEKsystems' Senior Automation Architects. During the project, the client's internal resources were increasingly incorporated into the process and a knowledge transfer was conducted.



**The Result:** As a result of TEKsystems' engagement, the client purchased and deployed the optimal test automation products for its unique needs and streamlined the SDLC and overall release processes. In addition, the client achieved increased test coverage for each release and reduced release test cycle time. TEKsystems enabled the client to establish a trained and experienced internal function for subsequent test automation activities.