

# Automation Testing of Desktop Applications for Accounting and Practice management SaaS provider



A leading SaaS provider for the professional services industry with more than 100,000 users worldwide benefits from the most complete product portfolio in the industry, including practice management and case

management solutions, tailored cloud options, document automation, and payment processing.

## The Challenges

- Low end-customer satisfaction with products
- High test cycle time
- Higher cycle time for robust test coverage in every sprint
- High costs

### The Impact

- a) Increased open-source automation and continuous integration delivered cost savings of up to \$1 million over a year
- b) Enabled the client to reinvest savings in QE initiatives.

### The Brief

The client was facing several testing challenges that directly impacted the product's delivery and quality.

- a) No Test Cases Documentation
- b) Writing Unit Test Cases was challenging because of application was developed in the '90s.
- c) Piecemeal automation test cases using a No-Code Automation tool with a cost of approximately half-a-million dollars for a year's license.
- d) Missing Continuous Delivery Pipeline

## Quarks Solution

**Shift-left and performance check the build quality before the developed feature is made available with the existing features.**

### **Hybrid Automation Framework**

Hybrid automation framework developed using open-source tool WinAppDriver, Sikuli, TestNg etc.

### **Quarks provided end-to-end automated testing in an Agile environment, utilizing only open source tools for automation:**

- Hybrid Test Automation and implemented the continuous delivery using WinAppDriver, TestNG, Sikuli, Jenkins etc
- Automated Test Bed Creation
- Test Reporting Dashboard

### **The Benefits**

### **Quarks innovative solutions helped:**

- Achieving 99% test coverage
- Early detection of defects by ~75% by Shift-left automation
- Reduced software delivery cycle from 1 Quarter to 1 month