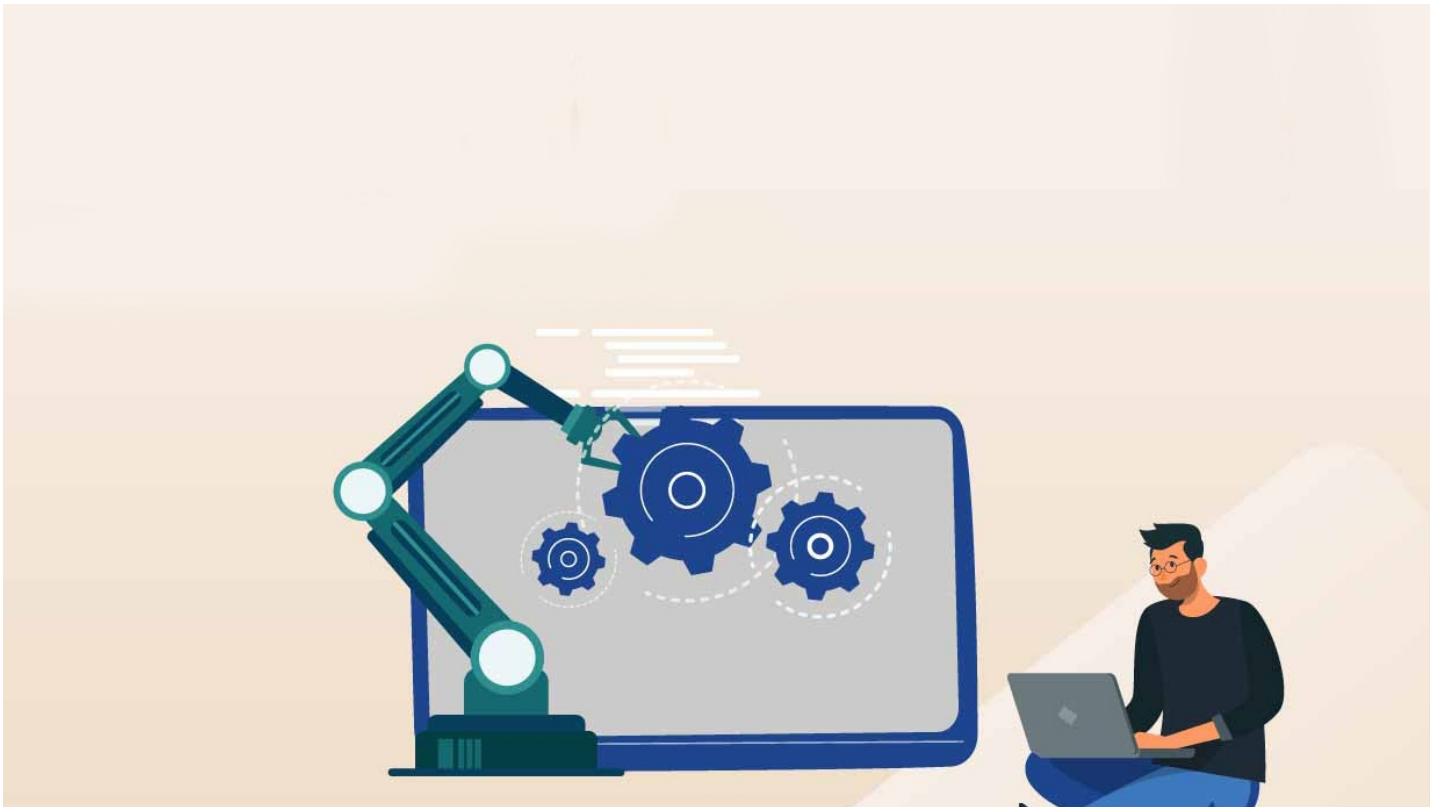


# Automation Testing of Desktop Applications



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

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

- High (manual) test cycle time
- Ineffective unit test automation for APIs, nothing for UI
- Missing CI and unoptimized CD pipeline due to flat deployments
- Low end-customer satisfaction with products

## Quarks Solution

**Docker-based dynamic and scalable QA, staging, and production environments with fine-grained CI/CD setup on Azure for total visibility and control.**

### End-to-End Testing & Process Automation

**High-quality automation test scripts built on top of proven open-source technologies such as Jest & Cypress etc. enabled for end-to-end automated testing and reliable CI/CD in Azure cloud environment:**

- Test automation toolkits for REST API as well as React.js UI powered by Jest, Cypress etc.
- Dockerized test bed creation for manual and automated testing.
- Integration and reporting to TestRail & SonarQube dashboard

## The Benefits

**Quarks innovative solutions helped:**

- Maintaining high test automation coverage
- Easy ephemeral environment creation for manual testing

- Early detection of defects by ~75% by shift-left automation
- Reduced software delivery cycle from 1 quarter to 1 month
- Increased open-source automation and CI delivered significant cost savings