

## Success Story

Daffodil helps Qdabra to setup a test automation infrastructure and reduce testing time by 85%

### Customer

Qdabra Software

### Country

United States

### Industry

Software & Technology

## About The Client

Based out of Washington, US, Qdabra Software is a leading provider in electronic forms and web services, offering specialized solutions to streamline data collection processes for organizations aiming to optimize cost savings and enhance business insights. Leveraging a range of off-the-shelf technologies, like Microsoft InfoPath, Qdabra extends its expertise through diverse consulting, tools, and hosting services, ensuring tailored solutions to meet varied business needs.

## Technology Stack

		
	 <b>Jenkins</b>	

## Business Situation

The client was in the midst of actively incorporating a host of new features and modules into their application. However, the application was becoming even more complex, making it hard to maintain the quality.

Simultaneously, the client was grappling with a highly competitive business environment. Other players in the market were also in the race to provide similar solutions. This put immense pressure on the client to not only match the pace of their competitors but also strive to outdo them. The need of the hour was to be the first solution provider in the market segment, ensuring their product remained relevant and desirable.

Despite the urgency and complexity of the situation, the client was operating without a standardized Quality Assurance (QA) management system. There were no defined test processes in place, and the application lacked measurable test metrics. Furthermore, the absence of Service Level Agreements (SLAs), the lack of a strategic planning & review mechanism further complicated the situation, making it challenging to assess performance and make necessary adjustments.

Recognizing these challenges, the client sought to implement test automation and regression testing best practices for their application. They envisioned an extensible, easy-to-integrate automation infrastructure that could facilitate frequent testing and ship code more frequently.

After a thorough evaluation of numerous vendors in the market, the client entrusted Daffodil Software to provide independent software testing and test automation services.

### **The key objectives outlined for the Daffodil team were as follows:**

- ✔ Develop an efficient, scalable, and easy-to-integrate automation infrastructure & implement best practices for regression testing.
- ✔ Set up standardized QA management, defining test processes, and establish measurable test metrics.
- ✔ Accelerate the time to release new features and modules.
- ✔ Develop a formal reporting mechanism and enable timely identification and resolution of issues.

Team Daffodil embarked on this project by initiating comprehensive manual testing services for the client's core product line. Simultaneously, we implemented test automation, encompassing the entire application workflow within the stipulated delivery timeline. Our team of seasoned QA experts diligently tested all product configurations across a multitude of platforms and devices.

## The Solution

### ✔ **Performance testing:**

To ensure the application could support networks of enterprise size, we conducted rigorous performance testing. We established lean metrics and implemented a robust reporting framework. Furthermore, we centralized test management dashboards, providing a detailed measurement capability even at the production level.

✔ **Complex test automation infrastructure:**

Given the vast functionality of multiple modules and suites, we established a complex test automation infrastructure using Codecept JS. Our QA engineers utilized this infrastructure to deploy and test the modules seamlessly. This setup minimized the time gap between receiving a new release and generating comprehensive test reports, which were crafted using the Mocha application. This level of efficiency reduced the regression testing efforts by 80-85%, ensuring the existing delivery flow remained unaffected.

✔ **Test script optimization:**

Team Daffodil went a step further by optimizing the test scripts, thereby reducing the execution time and enabling quicker result generation.

**The scope of our solution encompassed several areas:**

✔ **Pipeline architecture:** We analyzed and designed the pipeline architecture to ensure efficient workflow.

✔ **Best-of-breed CD tools integration & testing:** We integrated and tested top-tier Continuous Delivery (CD) tools to enhance the testing process.

✔ **DevOps and coded pipeline approach:** We integrated the continuous delivery practice with Agile & DevOps methodologies, promoting a more efficient and collaborative approach to development and testing.

By implementing these solutions, Team Daffodil was able to address the client's key concerns and objectives, paving the way for a more efficient, reliable, and high-quality application development process.

The impact of Qdabra's collaboration with Daffodil Software in automating the testing process has been transformative, yielding significant efficiency gains and cost reductions. The implementation of automated testing procedures has resulted in an impressive 85% reduction in testing efforts, translating into a remarkable 30% decrease in overall software testing costs. Notably, the time to market for Qdabra's products has seen a substantial improvement, with a 60% reduction when compared to manual testing methods. This heightened efficiency is further underscored by the team's enhanced flexibility, enabling them to meet challenging deadlines and deliver with exceptional efficiency even during peak workloads. Importantly, the products tested by Daffodil's proficient team are consistently delivered to the market on schedule, free from production issues, and characterized by a high standard of quality.



**The Impact**

<b>85%</b>	reduction in testing time
<b>60%</b>	faster time to market
<b>30%</b>	reduction in QA costs

## Customer Speaks

*"Wow! Congratulations. This is wonderful news. excellent work!" Daffodil has explored the functionality to implement a single login in automation test cases. earlier it was consuming around 3 hours for test case run and this enhancement has cut test case run time to 30 mins that is a reduction of 2.5 hours and an increase in efficiency. I thank you for your success with the FV automation stuff. It was a major highlight of our business success."*

**-CEO, Qdabra Software**

## Services Used

**DevOps**

**Software Testing Services**

**Automation Testing Services**

**Have a software product vision in mind?**

Setup a personalized consultation with our technology expert.

**Let's Talk**