

## US Government Agency Accelerates Automated Testing with Subject7

### Introduction

This US Federal Agency manages billions of dollars in grants for the US government and supports a worldwide base of users, along with hundreds of government employees at adjacent agencies who are responsible for reviewing and approving grant requests and applications. The agency maintains more than 20 enterprise web applications and maintains a staff of over 35 testers. They had tried utilizing the HP Unified Functional Testing (UFT) product in the past to help automate their regression tests. Due to the complexity, there were a lot of scripts written that could not be used or maintained by their testing team which was comprised of non-developers.

### Challenge

As the agency began moving to an Agile development methodology, it became more critical to implement automated functional testing to execute frequent regression tests. Their testing team, many of whom were contracted via a 3rd party service provider, was not originally staffed with test automation experience as a prerequisite. For that reason, they needed to look for an approach that would allow non-technical users to automate software tests without having to script or write code using a programming language.

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Their research led them to test automation frameworks such as UFT, Selenium IDE, and Ranorex which each offered a traditional record and playback capability as well as code-based approach to testing.

The challenge emerged with the realization that none of the tools they tried offered a true codeless approach to test automation. Each time the recording broke, they found that maintaining and enhancing the scripts required coding knowledge and expertise. This made their testing team increasingly reliant on technical resources which were scarce and

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expensive in the agency. The time lost in seeking technical help slowed their testing cycles and placed the team in an unwinnable situation where they would need to slow the release schedule or take shortcuts that risked major defects escaping to production. The team needed a better solution and they needed it fast.

### Solution

The agency learned of Subject7 and made the decision to start a trial. They found the Subject7 approach aligned well with the skill levels of their team and provided a guided approach to test automation. The users embraced the defined steps and dialog boxes which could be easily edited and maintained through the Subject7 interface. Based on their trial, they demonstrated that even junior testers and high school interns were able to use Subject7 to automate test cases with minimal ramp-up and adoption support.

Following the successful trial, they purchased 20 initial user-licenses. Impressed with the accelerated pace of automation and Subject7's responsiveness to their feedback and recommendations, the agency acquired more licenses, equipping their entire testing team with Subject7 licenses.

Subject7 became an enabler of their testing vision. Today the agency hosts test automation forums every other week where testers share knowledge and best practices, demonstrate new features, encourage testers to automate more, and address technical challenges. They have established best practices and automation standards to be used across the program. They have configured their Continuous Integration capability with help from Subject7 plugins for Cruise Control and Jenkins. Automated tests are running fast and frequently and provide rapid and early feedback in each sprint.

This agency achieved their automation goals utilizing a non technical testing staff and Subject7's True Codeless technology. Today, they deliver high-quality software to their customers in a timely manner.