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Protech Automated Their Regression Testing using Rapise and SpiraTest from Inflectra

Rapise and SpiraTest enabled Protech to dramatically improve the speed and efficiency of their testing

Industry

Information Technology

Objective

Parallel regression testing across as many as 15 environments within a limited time frame while improving documentation structure.

Approach

Replace manual testing with automated testing and manage those tests with seamless integration.

Business Outcomes

- Improved documentation structure of requirements, test cases and test scripts

- Reallocation of resources dedicated to manual testing

- Increased QA across all environments, not just critical components

Technology Outcomes

- Dramatically improved rate of regression testing across environments

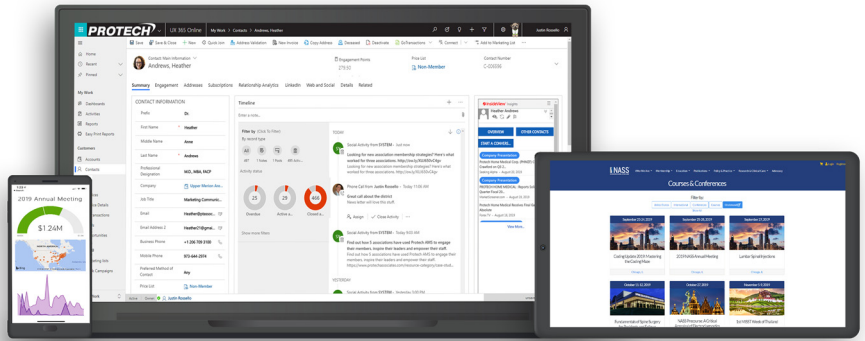- Integrated automated testing with test management

PROTECH

"We did a lot of research prior to deciding on a vendor for Regression testing software. For us, the combination of Spira and Rapise offers the best balance of Cost vs. Functionality/ features, and customer service. It's rare to find a company that can do all of these very well."

– Mike Becker & QA Team – Protech Associates, Inc.

Automating Regression Testing for Efficiency

Protech was looking to automate much of their regression testing and integrate these tests with a test management system. The company needed a solution that would quickly and simultaneously test updates to its multitude of systems to ensure smooth functionality while managing requirements, test cases and defects. Manual testing lacked efficiency and was impractical for anything more than critical systems testing. Rapise and SpiraTest allow the Protech team to automate regression testing and improve QA.

Background

Founded in 1984, Protech has dedicated over three decades to helping associations deliver unique, exceptional member, staff and leader experiences with cutting-edge technology. Protech Associates, Inc. is a Microsoft Gold Partner. Its flagship product, Protech AMS, is a Microsoft Azure cloud based solution geared towards Association Management, including modules for: membership, meetings, exhibits, education, fundraising, advertising, accounting and other e-commerce.

Protech has two distinct testing environments:

- Azure – Microsoft Dynamics 365: used by client staff members for the standalone features as well as a back office for supporting the web/end user facing product, MX 365 .

- Microsoft.NET – at its highest level, uses .NET web parts to read and write data stored in Microsoft Dynamics 365 and allows Protech to extend functionality in Microsoft Dynamics 365 to its clients' end users/ members.

Challenge

Protech aimed to adopt parallel, or near to parallel, testing across its product line.

Since its entire line is based on the Microsoft Dynamics 365 platform, when Microsoft releases an update or other important change to the Dynamics 365 product, that change has the potential to impact nearly all of Protech's product environments. With different environments for quality assurance vs. development, back office vs .NET, and the addition of different environments for different versions of the internal products, there can be over 15 environments requiring regression testing within a very limited time frame. With manual testing, it was not possible to test everything, and Protech's testing was therefore limited to only the most critical environments.

Revving up the process

Protech needs to efficiently test many environments after each Dynamics 365 update, as well as internal product benchmark intervals, to ensure the clients' systems and Protech's own internal systems are working properly. Much of this testing previously was simply performing the same tests over and over again in different environments – not an efficient use of manual testing resources, nor an expedient approach to thoroughly test each environment.

Solution

Protech evaluated a variety of tools prior to choosing Rapise and SpiraTest. Several factors played into the decision, including the
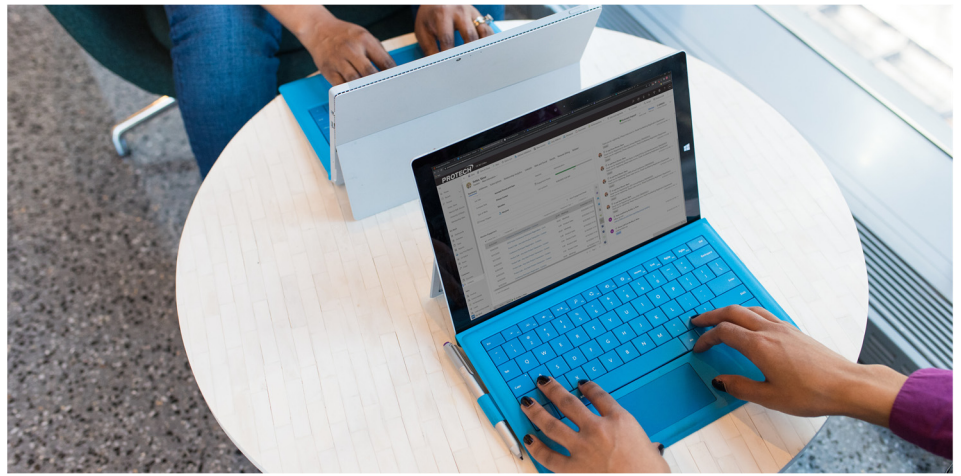
Solution at a Glance

fact that Rapise is based on newer technology than other tools, and SpiraTest can be used in the cloud rather than having to contend with installation and maintenance of a dedicated server. SpiraTest provides a seamless integration with Rapise for test management and maintains excellent documentation for validation. In addition to the many features the tools provide, there is a low initial cost and annual maintenance fee, and the customer service is responsive, informed and supportive. Protech also opted to take advantage of Inflectra's training to quickly become fluent.

Upfront investment pays dividends

Given the scale of Protech's regression testing, the team built into their rollout a substantial development effort to program the tests. These tests are integrated with SpiraTest, which provides a robust structure for documenting requirements. Protech therefore decided to undertake a full revision and update of their manual regression testing documentation as well. This emphasis on excellence at the beginning of the process will reap the rewards as, over time, development costs decrease, and the inventory of regression tests increases, earning big returns on their investment.

Benefits

Adopting Rapise and SpiraTest has provided Protech with concurrent automated testing throughout its product lines, while supporting robust QA processes across the organization.

Rapise conducts with ease the regression testing that includes testing the functionality in Microsoft Dynamics 365 as a standalone environment, combined with testing Dynamics 365 when the source of input/output is Protech's end-user facing .NET environment. The latter testing involves significant numbers of round trips between the two environments during the normal course of regression testing.

SpiraTest provides Protech with a much better documentation structure where the team can easily assign test requirements to test cases prior to developing the test scripts. A key benefit SpiraTest allows is that a single requirements planner can create consistent behavior in terms of testing tasks and expected behavior, helping to reduce large discrepancies based on developer style and preference.

Great Customer Service

According to Protech, Inflectra's customer service is "*Outstanding! They continue to provide excellent customer service to this day.*"