

A Revolutionary Approach to Regression Testing



"Quality Made Certain,
Satisfaction Guaranteed,"
CertainTeed's story



Original Software



Introduction

CertainTeed is a North American manufacturer of sustainable exterior and interior building products. With a staff of more than 6,300 employees they operate more than 60 manufacturing facilities throughout the United States and Canada. Founded in 1904, it is a wholly owned subsidiary of Saint-Gobain, the world's largest building products company. www.certainteed.com

Marc Croquette, an IT Director at CertainTeed Corporation, is responsible for multiple, heavily customized SAP implementations across 5 divisions. He has shared his fascinating story as to how his team ensures that every change is entirely fit for purpose.

The Challenge: High rate of change overwhelming the users

SAP is the strategic backbone for CertainTeed, but there are also numerous integrated applications including Salesforce, Manhattan Associates and Hybris. Changes come thick and fast from multiple sources: rollouts; upgrades and patches; business process modifications and enhancements. A plethora of overlapping projects from different business units compete for scarce analysis and testing resources.

Consequently, business users were being asked to abandon their day jobs and repeatedly assist in the verification of the changes. These users naturally became disenchanted with IT and the process was increasingly difficult to manage. Matters were further complicated by some teams being scattered across a range of time zones which exacerbated communication and collaboration.

In summary, the process simply wasn't working – the necessary checks didn't always happen and were very costly and inefficient to run, leaving room for defects to reach production.



The Vision: Automate all key scenarios, check everything

Marc knew that CertainTeed needed to not only test the areas that had changed, but as importantly, they needed to test that defects had not been unwittingly introduced as a result.

It was obvious that test automation was the only way that the burden on the business users could be relieved. What wasn't known was whether a solution existed that could check every item on every screen and report all differences.

If such a solution could be found Marc had a process in mind which he vividly describes based on an airport luggage carousel. In the same way that all the baggage from aircraft arrives on the carousel, Marc envisaged every difference found in a regression test being automatically reported. Then, just like passengers in an airport, his business analysts would 'collect' the differences they expected and anything still on the carousel would be an unexpected change and would need to be investigated.

The Solution: TestDrive from Original Software

CertainTeed came to Original Software as [TestDrive](#) could deliver two vital capabilities. Firstly, TestDrive captures every item on every screen automatically, without any coding. Secondly, TestDrive allows the results of a regression test to be compared to any selected baseline, highlighting every difference. So, no coding, no limited specific validations, just 100% coverage.

TestDrive could also help Marc bridge the knowledge gap between the business users and the automation team. CertainTeed were able to utilize [TestDrive-UAT](#) to capture every business process across multiple applications. The result was easy to follow documentation and animations that provided the small automation team with the information they needed.

This led to greater synergy and collaboration between IT and business users, essential for effective QA validation.

Equally [Qualify](#) has allowed Marc to implement his weekly 'carousel' vision. Expected differences are claimed by his business analysts while the abandoned bags are examined to determine if they are defects which must be addressed or pulled before release to the production environment.



The Results

The Original Software solutions have allowed Marc to deliver his vision to the business and its productivity has exceeded his expectations with over 100 business scenarios now fully automated. The specific results are impressive:

- Payback started rapidly with the first scenarios up and running within 6 weeks
- 80 scenarios up and running within 5 months
- Several significant defects, which would previously have been missed, have been caught before production
- No issues in the areas covered by the automation scenarios have reached production
- Efficiency, especially for super users, was dramatically increased and the user fatigue issue associated with conference room pilots was completely removed.
- Completely documented test results are also being used as the basis for training and on-boarding new staff. Marc estimates that hundreds of man days have been saved in this area alone.
- CertainTeed can now support a faster delivery schedule. More is now achieved with the same resources, including the automatic creation of a complete audit trail.



The overall summary is what matters. Marc reports that he now has a happier user base who have regained confidence that IT can deliver the evolving but stable platform they need for business success.

The Future

Marc and his team are now building on this success, increasing the number of business scenarios that are automated across their various divisions and expanding the number of applications they cover.

About Original Software

Original Software has a world class record of innovation that drives solutions which empower users to deliver higher quality applications to their business. These solutions embrace all mainstream applications including SAP, Salesforce, Microsoft Dynamics and Oracle EBS.

These solutions include Qualify for sophisticated quality management, TestDrive-UAT for manual testing, TestDrive for full test automation and TestBench for test data management.

More than 500 organizations operating in over 30 countries use Original Software solutions. Current users range from major multi-nationals to smaller development teams, encompassing a wide range of industries, sectors and sizes. We are proud of our partnerships with the likes of Allianz, Costco, CertainTeed, Delta Dental of WI, Euronet. IAT Insurance, O'Reilly Autoparts, Cayman National Bank, Topcon, and DSC Logistics.



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