A Broadcom Company
technologies

Product Brief

Agile Requirements Designer

Start Right with Agile In-Sprint Automation

Key Benefits

- **Improve quality.** Optimize testing by getting 100% coverage with the smallest number of tests.
- **Boost application delivery speed.** Reduce manual effort by automating test design and execution processes, data allocation, and change implementation.
- **Reduce testing cost.** Reduce costly rework by detecting defects earlier when they require less time, resources, and cost to fix.

Key Features

- **Requirements modeling.** Reduce ambiguity and rework by mapping actual requirements into visual, active flowcharts for model based tests.
- **Test case optimization.** Help dramatically shorten test cycles so that you can test where it matters, using the smallest set of test cases that are designed to reduce the load on test environments.
- **Test case design.** Automatically create test cases from requirements, for maximum test coverage to exhaustively test an application.
- **Test collaboration.** Maintain the accuracy of test cases that can be designed while different parts of the code are being worked on simultaneously.
- **Visibility and traceability.** Identify the impact of changes to requirements through dependency visualization that automatically update test cases in minutes.

Overview

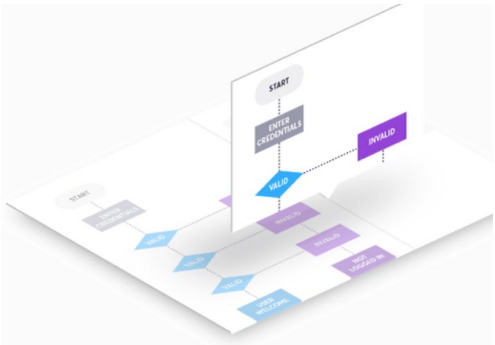
Quality is imperative to driving revenue through stellar customer experiences. This is why organizations are increasingly focused on improving software quality and application delivery speed. Test teams strive to test in every sprint but traditional testing practices hold them back in a big way. How can you achieve the speed, velocity, and volume of changes required to attain continuous testing at the speed of agile? Agile Requirements Designer is the solution.

Business Challenges

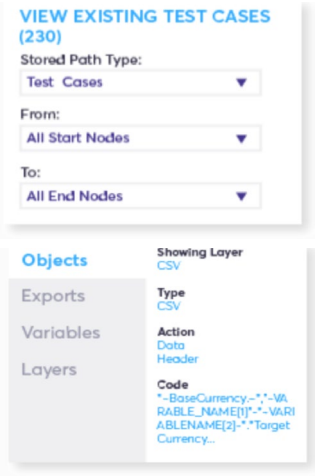
- **Sixty-four percent of total defect costs stem from the requirements engineering and design phase**. This means that more than half of the time, defects can be traced back to poorly defined requirements. Poorly defined requirements result in costly code defects, rework, and a poor customer experience. (*Quality Flaws: Issues and Challenges in Software Development*. Hyderabad Business School, GITAM University. 2012.)
- **Seventy percent of testing is still manual**. Test teams are inundated by myriad mundane tasks. Teams spend too much time creating tests by hand, reading requirements, creating traceability matrices, identifying and creating test data, and more. (*Bloor Research Spotlight Paper: Automated test case generation.* Howard, Philip. September, 2014.)
- **Only 10-20% of tests are covered, exposing software to defects**. Because manual testing is tedious and inefficient, it can lead to both under-testing and over-testing. Some features are tested too little while others features are tested too much, some times as much as 18 times over. (Implementation experience metrics collected by CA Technologies.)

Solutions Overview

True and smart testing at scale. When you use Agile Requirements to test at the speed of agile, you reduce manual testing effort while delivering better quality applications to market faster. Advanced engineering of requirements and test design automation capabilities help you to drive agile testing approaches in every sprint. Agile Requirements Designer automatically generates the optimal set of tests directly from your requirements. It models complete and unambiguous flowcharts for maximum test coverage. Tests are maintained as a single source of truth that is scaled for use across teams. When requirements change, Agile Requirements Designer automatically updates these tests.



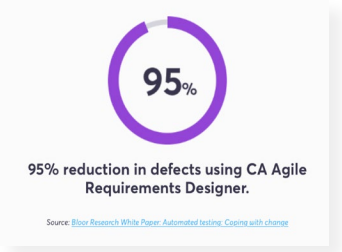
Solutions Overview (cont)



The results? You deliver software that reflects changing user needs.

- **Design and engineer better requirements**. With Agile Requirements Designer, test teams get clear, complete, and unambiguous requirements. Diagrams that represent requirements as mathematically precise visual flows add accuracy to requirements. Increased accuracy reduces ambiguities while supporting better collaboration and communication across key stakeholders.
- **Optimize test cases**. Agile Requirements Designer creates the smallest number of test cases so that you can test where it matters. And Agile Requirements is integrated with various lifecycle management tools such as Rally Software®, HPE ALM, Atlassian JIRA and more. This integration means that test teams can easily import test cases, remove duplicates, and export optimized test cases back to their existing management system.

- **Automate test design**. From your requirements models, Agile Requirements Designer automatically creates test cases that are linked to the right data and expected results so that you can exhaustively test an application with maximum test coverage.
- **Single Source of Truth**. Tests are stored in a central hub with version control and subflow maintenance so that multiple users can simultaneously work on a single piece of code.
- **Manage and adapt to changes**. As requirements change, testers can use Agile Requirements Designer to automatically identify the impact of a change, identifying tests that are no longer valid and updating test cases in minutes, efficiently streamlining releases.

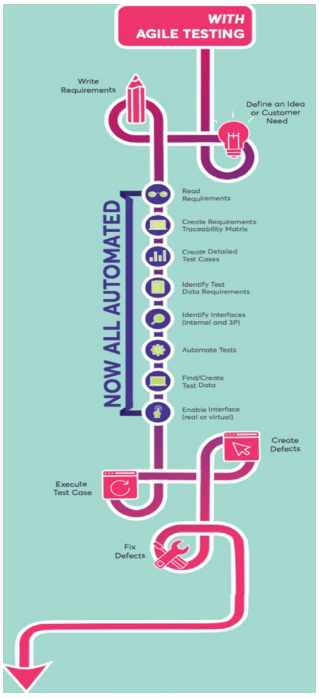


In-Sprint Everything

You know you are on the right track to achieving agile testing when you can *in-sprint everything*. When you are truly agile, you consistently meet your sprint goals:

- You are not lagging behind every sprint.
- You are doing in-sprint test automation.
- And you are doing releases at the end of every sprint.

Agile Requirements Designer can help you get there by breaking the barriers to testing at the speed of agile, while helping you focus on improving quality, collaboration, speed, and efficiency.



CS200-304386-0219-PB August 13, 2019