

## Parasoft Is A Leader Among Omnichannel Functional Test Automation Providers

Excerpted From The Forrester Wave™: Omnichannel Functional Test Automation Tools, Q3 2018

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### Parasoft strengthens its developer focus and makes API testing easier.

Parasoft has traditionally been a go-to testing platform for developers. In the past 12 to 18 months, it has added features to appeal to less technical folks too. Its recent addition of a specific UI enables testers with no coding experience to easily generate and manage API tests — all facilitated by underlying ML. Regarding AI, Parasoft has an impressive and concrete road map to increase test automation from design to execution, pushing autonomous testing. Parasoft shined in our evaluation specifically around effective test maintenance, strong CI/CD and application lifecycle management (ALM) platform integration, as well as reporting through its analytics system PIE. Clients like the recent changes, and all reference customers reported achieving test automation of more than 50% in the past 12 months.

The recent tool updates are important because customers complain that the tool is relatively hard to master. Customers often need Parasoft specialists' support to leverage its full potential. Pricing would benefit from flexibility for gradual enterprise adoption. Parasoft also has some work to do in addressing front-end mobile testing, which it only offers through partners adding little value-add.

FORRESTER WAVE™: Omnichannel Functional Test Automation Tools, Q3 2018



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**Parasoft Evaluation Overview**

## CURRENT OFFERING

Tool running as SaaS	The number and variety of platform configurations of the Parasoft's solution, including its authoring, execution, and reporting components, are above average, compared with its peers in the Forrester Wave (e.g., on-premises, SaaS on private clouds, SaaS on leading public clouds [e.g., AWS, Azure, Google Cloud Platform], SaaS on strong contender public clouds [e.g., IBM, Oracle, Salesforce]).
Supported browsers	Parasoft has its own tool that supports average number and variety of browsers, compared with peers, with multiple versions of these on all platforms solution supports (e.g., Chrome on iOS and Windows, Edge, Firefox, IE, Safari on iOS). The solution also works with Selenium WebDriver and/or Appium as well as Selenium and/or Appium productivity accelerators.
Record and playback	The solution has an average number and variety of UI and RP functionality in above list, compared with peers. Clients achieved average levels of automation.
Scriptless/script editing	The solution interface provides an average scriptless environment or at least one where scripting is an easy high-level language, not requiring in-depth technical skills or programming and providing capabilities like those described above.
Test script coding	The solution provides average open scripting options via developer programming languages (e.g., JavaScript, C#, C++) and open source frameworks (e.g., Appium, Selenium), compared with peers.
API testing types and services	The solution provides superior API testing through API import capabilities from services definitions and types, such as REST - RAML, REST - SWAGGER, JMS and JML, MQ, SAP, and SWIFT, compared with peers. Services to test can be created through data from application servers and API management tools as well as through discovery of endpoints.
Combined automation	The level of combined automation is above average within the peer group, with API tests that can be combined and orchestrated with other APIs on different technologies; with GUI recording, scripting, keywords, and programming; and in back-to-back automation across desktop, web, and mobile, allowing flow control, data passing, and variable passing.

## Parasoft Evaluation Overview

Design automation and optimization	The solution provides average capabilities relative to others in this evaluation for features like those listed above.
TDD/BDD	The solution provides on-par capabilities relative to others in this evaluation, comparing features like those listed above.
Packaged application testing	The solution has below-average capabilities, compared with peers, with limited support for packaged app testing, support only through a third-party integration, or support only at the web interface level with no accelerators or no packaged app testing support.
Automation execution/ continuous testing	The solution has capabilities on par with others included in this evaluation for features listed above.
Test maintenance	The solution provides superior capabilities relative to others in this evaluation for features like the following. The tool captures affected test cases and automation and flags them for review when a shared or dependent test component changes through a built-in or companion tool (e.g., IDE, TM, ALM). The tool has built-in capabilities to update affected test cases automatically when a shared test component changes. The product integrates with a separate in-house tool to update affected test cases automatically when there are environment changes. The tool offers traceability to the code level through integration with a variety of the following third-party industry-standard version-control tools: Subversion, Git, GitHub, TFS VC, CVS, ClearCase, or SourceSafe. The tool can report on the impact of changes to shared or dependent test components. Tests are easily maintained as new product versions are released.
Real-time test monitoring (RTM)	The solution provides average capabilities in shifting monitoring left and integrating it with testing while shifting testing right to be leveraged by monitoring for the above examples. Or it provides average value-add, compared with others in the Forrester Wave, through integration with third-party monitoring tools.
Reuse	The solution provides superior capabilities relative to others in this evaluation for features like the following: 1) reuse of its core automation assets: test cases, recording and automation scripts, code, and/or automation models; 2) reuse of these assets over APIs, messaging, protocols, browsers, browser versions, and configurations supported by the tool; 3) reuse at the project level and across teams; 4) less change to the original assets for reuse across various environments; and 5) reuse across web and mobile.
Personas	The solution provides on-par capabilities relative to others in this evaluation, targeting a subset of the three target personas listed or all three but not too effectively. Referenced clients provided average feedback.

## Parasoft Evaluation Overview

Functional/performance performance	The solution provides on-par capabilities relative to others in this evaluation, enabling reuse of test automation capabilities for load performance testing limited to web only or mobile device only but not both unless few changes to tests or few clicks are needed.
Reporting and analytics	The solution provides superior capabilities relative to others in this evaluation, comparing features like the following. It uses its own advanced analytics based on ML to provide prescriptive insights or risk factors. The tool provides its own analytics on both test design and test execution, with automatic handling of design defects, test failure reasons, redundant tests, and more. Functional test reporting of the tool is native and highly customizable. Its reports are highly dynamic with one-click options to drill down on data and correlations. The tool generates reports via integration or pass-through to ALM, BI, or TM tool. The tool can save resulting testing data and reports for sharing among users and generating reports later (via repository or other means).
Device lab	The solution provides on-par capabilities relative to others in this evaluation, including integrated device management capabilities for executing tests on physical devices only or simulated and/or emulated only and supports cloud deployment or on-premises on its own or on one or more cloud device labs.
Device sensors	The solution provides below-par capabilities relative to others in this evaluation in addressing sensors listed above or has a below-par partnership (established prior to April 15, 2018) to do so.
Mainframe automation	Parasoft provides on-par capabilities for a truly OFTA solution. Automation is supported only on web and mobile seamlessly, and it needs tweaking or programming to run on mainframe.

## STRATEGY

Product road map	Parasoft's road map received superior scores on Forrester's product road map requirements, compared with peers. An efficient execution of vision and road map will make the product more competitive, compared with peers. Requirements evaluated include alignment with Forrester's Agile-plus-DevOps continuous testing vision. It provides additional "aha" ideas in the road map. Vision and road map are clearly and exhaustively presented. Road map aligns with vendor's vision. Customers are aware of and happy with the vendor's vision and road map.
Pricing strategy	The solution provides on-par capabilities relative to others in this evaluation and offers multiple options that are moderately flexible and transparent. Reference clients were either neutral or moderately positive about flexibility, transparency, and value for money.
Partner strategy	The solution provides on-par capabilities relative to others in this evaluation for the above.

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