CA Application Test

ca technologies

At a Glance

CA Application Test is a collaborative automated testing solution designed to test and validate modern Web and mobile applications along with the APIs, Web services and legacy backend protocols. The expansive protocol support means that actions taken to invoke a business process or rule from the UI or API can be validated in the implementing technology. It features a codeless testing framework that enables multiple cross-functional team members to design and execute automated unit, functional, regression, integration and performance tests covering modern through legacy technologies.

With CA Application Test, you can dramatically reduce the cost of validation, increase test coverage without increasing resources and simplify your testing architecture by consolidating the number of tools needed to test.

Key Benefits/Results

- **Increase productivity.** Reduce manual testing and run more tests without increasing resources.

- **Improve quality.** Increase test coverage and catch more defects earlier.

- **Streamline test orchestration.** Provide testers with a single, easy-to-use tool to run all tests across all systems including mobile.

- **Increase time for exploratory testing.** Automate repetitive tests and spend more time testing new features.

Key Features

- **Standard support is industry-leading standard support.** Get native integration for most J2EE servers, ESBs, Java™ objects, DBs, file Sys and legacy objects.

- **Mobile testing is automated.** Use existing test for filters, assertions, reports or data sets with an Appium based plug-in for iOS and Android app tests.

- **Get API test creation and management.** Use a graphical visualizer for JSON-based payloads and path generation.

- **Collaborate with high productivity visual tests.** Test "headless" middle tiers with no UIs.

- **Load testing is customized.** Set up parameters. Test REST services. Run hundreds of simulations at once.

- **Get advanced analytics and build level reporting.** Track errors across the entire test and report at the build level.

Business Challenges

Delivering high-quality applications is key to an organization's survival. Development has become more agile, but QA processes and test tools have remained largely unchanged. Testers still run many tests manually and the use of shareable, reusable test assets between teams is limited or nonexistent. Most organizations know they need to automate more but still find themselves reverting to manual testing processes. Key reasons for this include:

- **Multilayer testing and tool compatibility**—Modern applications are complicated and tests need to be validated across multiple systems, APIs and services. This requires a much higher degree of test orchestration and interoperability between tools to automate tests effectively.

- **Shortened feature release cycles**—Build cycles for feature updates keep getting shortened and testing can't keep up. This adds to the backlog of manual tests that need to be automated.

- **Mobile testing**—Mobile applications need to be tested across devices and across various platforms and networks. As a result, numerous test cases need to be scripted and run for each new feature.

- **Technical skills**—Developers often create the initial automated test cases and keep them updated. If they don't have the time to do this, manual tests are used.

Solution Overview

CA Application Test helps organizations overcome test automation challenges by providing a single platform that enables non-technical testers to run any test on any system. This solution automates functional, regression, mobile, API, Web UI and performance tests across all application layers by invoking and verifying the behavior of each component. It moves the test case and validation closer to the logic by supporting testing in a browser or on a mobile device or by directly invoking backend APIs or services. This saves time and allows testing cycles to happen faster and more often.
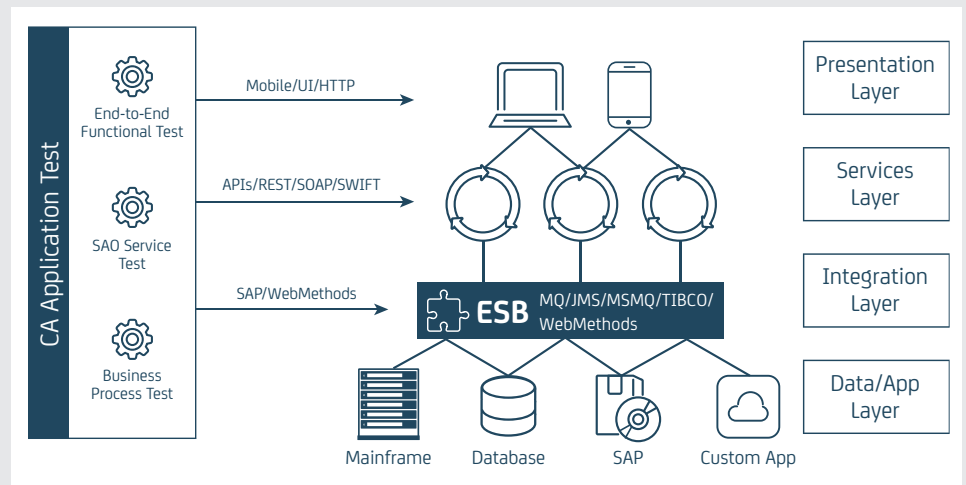
CA Application Test also builds portable, executable test cases that are easy to extend, modify and maintain, easy to chain into workflows with other tests or suites of tests and simple to integrate with existing test repositories.

Critical Differentiators

Unlike other test automation platforms, CA Application Test provides a scriptless solution to run all types of tests across all application layers from a single management console. Key functionality delivered by CA Application Test includes:

▪ **Ability to integrate mobile testing into your delivery process with run-on-demand, release and performance testing**—Using a simple recorder, users can generate tests and then reuse them across different devices and mobile simulators.

▪ **Option to configure local mobile devices, use simulators, set up labs and/or integrate with cloud platforms**—Testers can point their test case to a locally connected device, a simulator, an in-house lab or the CA Mobile Cloud (Powered by Perfecto).

▪ **Test and validate across all layers with a single test**—CA Application Test's unique ability to invoke and verify a single test across all layers of the application make it a great fit for organizations that need to test applications that must work with legacy systems, custom applications, ESBs and back-end databases.

▪ **Selenium-based web UI testing with enhanced visual editor**—Users can load tests developed in Selenium UI to run tests across multiple browsers, record a web UI, examine screen objects and take screenshots. Once tests are loaded, they can be edited easily using a native visual editing tool.

CA Application Test—Invoke and verify functionality at every layer of the application to make test automation a reality.

Related Products/Solutions

▪ **CA Test Case Optimizer** uses the application requirements to generate the smallest number of test cases needed for 100 percent functional coverage. Tests can then be loaded into CA Application Test to run automatically.

▪ **CA Service Virtualization** enables first-day automation by simulating missing services, functionality and data. When used with CA Application Test, it stabilizes the test environment so that it can run without false failures.

▪ **CA Test Data Manager** is an end-to-end test data management solution that enables organizations to generate secure, purpose- fit test data on demand. Data can be uploaded into CA Application Test and the same data can be used for functional, regression and performance testing.

▪ **CA Continuous Application Insight** accelerates test authoring for legacy applications and application without well-documented requirements. It can take the backlog of regression tests associated with manual UI testing and generate new automated tests that test at the API layer.

For more information, please visit **ca.com/devcenter**