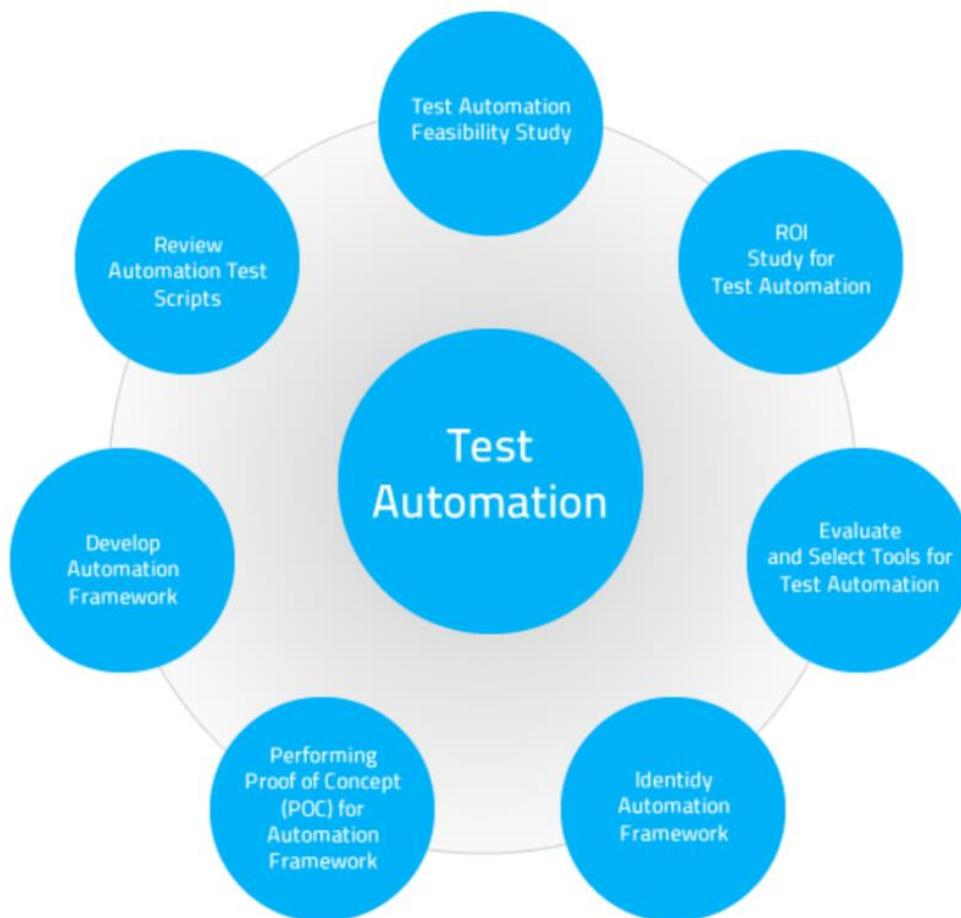


## TOP 7 efficient app testing tools for 2021-22

Nowadays, we're facing an exponentially growing number of apps. Only in the first quarter of 2021, the Apple App Store counted **2.22 million available apps**, while on Google Play Market they were in a number of 3.48 million. ([Statista](#))

Due to the fact that the competition is high, obviously, there is a huge demand on them to provide a top user experience journey. To ensure apps' workability and efficiency, the development team, namely quality assurance engineers, continuously improve apps, fix bugs by regular tests. Clearly, tests are the key aspect that ensures apps' security, scalability, functionality, accuracy, and many others that offer the user a great experience.



To run comprehensive app check, QA teams rely on manual testing, web testing, browser testing, regression testing, and API testing, and more. Regrettably, this process is time-consuming. Therefore, quality assurance engineers' resort to certain tools in order to carry out automated tests.

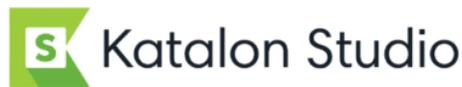
To clarify which tools are more practical, more effective for testing applications in 2021-22, we realized comprehensive market research and came up with an integrated analysis on this topic. You're curious? Let's see what each of them represents.



**Selenium** framework is intended for testing web applications on various browsers and platforms such as Windows, Mac, and Linux. Selenium helps QA engineers to write tests in different programming languages such as Java, PHP, C#, Python, Groovy, Ruby, and Perl. Moreover, this tool offers recording and playback functionality for writing tests without learning the Selenium IDE (Integrated Development Environment). Selenium proudly supports some of the largest, well-known browser vendors who are confident that Selenium is a native part of their browser.

If we refer to its advantages, we emphasize the flexibility, additionally the ability to write complex and efficient scripts to test the applications. On the other hand, in order to start working with Selenium, the tester must have extraordinary knowledge of programming and be ready to devote some of his time and energy to writing special frames and libraries that provide specific functions during the testing process.

**License:** free.



**Katalon Studio** is built with a specialized IDE for testing APIs, web apps and mobile devices. It can be integrated into CI/CD and works great in conjunction with popular tools when testing software: qTest, JIRA, Jenkins, and Git. A nice feature that it provides is Katalon Analytics, thanks to which users get a complete picture of the testing process, as extensive reports that are displayed on the user screen in the form of metrics, charts, and graphs.

Besides that, this tool includes a full suite of powerful features to help overcome common challenges in automating frontend testing, namely:

- built-in Object Repository, XPath, Object Reidentification;
- supports Java / Groovy scripting languages;
- built-in support for image-based testing;
- serves as a support for continuous integration tools like Jenkins and TeamCity;
- supports Dual editor interface;
- customizable execution workflow.

**License:** free.



**Telerik Test Studio** supports the automation of apps like HTML5, Angular, ASP.NET, AJAX, JavaScript, Silverlight, WPF, MVC, Ruby, and PHP for iOS, Android. Telerik provides cross-browser support, serving also as a recording and playback tool. It supports 2 scripting languages C# and VB.Net. Test Studio can connect to version control systems such as Team Foundation Server and GIT, performing continuous testing. Telerik allows users to schedule tests, run tests in parallel. In addition, this tool offers robust test reporting features.

Its EveryStep Web Recorder feature can register every step and replay the scenario in a real browser. EveryStep Web Recorder is a web scripting tool used to record complex user's actions, from clicking a button to navigating eCommerce. Scripts are used to run load tests in LoadView.

In addition, this tool offers one solution for automation testing of desktop, mobile apps, including UI, load, and performance testing, besides other various compatibilities such as:

- manual testing;
- integration with bug tracking tools.

**License:** from \$199 per month.



**TestComplete** is one more effective tool that has won the recognition of top testers. It's designed for testing desktop, mobile, and web apps. TestComplete supports various scripting languages such as JavaScript, Python, VBScript, JScript, DelphiScript, C ++ Script, and C# Script. Moreover, with TestComplete, testers can perform keyword testing and data-driven testing. The instrument also provides a convenient function for recording and replaying the testing process.

TestComplete has a GUI object recognition feature that automatically detects and updates UI objects, thus avoiding the hassle of maintaining test scripts when AUT changes. This tool also integrates with Jenkins during the CI process.

More than that, TestComplete offers the following features:

- test renderer;
- script testing;
- test recording and playback.

**License:** from \$6,359 per year.

## — IBM Rational Functional Tester —

**IBM Rational Functional Tester (RFT)** supports the ability to test a wide range of apps written in various programming languages such as HTML, Java, Dojo, Ajax, Microsoft Windows, Microsoft .NET, Microsoft Silverlight, Microsoft Visual Basic, Siebel, Flex, GEF and PowerBuilder as scripting languages. RFT has a unique feature: Storyboard testing, through which all user's actions related to automatic testing are recorded and visualized in the form of sequential images, app's screenshots at various stages of its testing.

With RFT's feature, "Storyboard Testing," users can visualize and edit tests by original language, colloquial expressions, and application's screenshots. As an IBM application, this tool integrates well with other IBM products.

**License:** from \$3400 per month.

## — HPE Unified Functional Testing —

**HPE Unified Functional Testing (UFT)** offers functional and regression test automation for web services, sites, API, graphical interface of mobile, desktop and web apps on almost all platforms existing today. This tool supports over 200 apps and environments, including web, SAP, mainframe, Salesforce, PDF, Java, Citrix, etc.

Additionally, UFT allows integration with Mercury Quality Center and Mercury Business Process Testing. Furthermore, UFT tool supports CI/CD through integration with CI tools such as Jenkins, Azure DevOps, Bamboo and other products, as well as version control for Git, Subversion, TortoiseSVN and more.

Its advanced functionality for recognizing objects is based on images. In addition, reusable test components are available as well as automation documentation.

**License:** from \$600 per month.

## — SoapUI —

**SoapUI** covers the entire testing spectrum (functional, security, load, mocking). This tool can easily execute tests for REST and SOAP APIs and Web Services easily. It supports all standard protocols and technologies

for testing all kinds of APIs. Additionally, SoapUI allows to create and execute automated functional, regression, and load tests quickly and easily. SoapUI was created for advanced users looking to make more sophisticated automated tests and manual calls when is needed. Furthermore, this tool creates its own codes using the Groovy tool. Its Pro version has a user-friendly interface and several additional features, such as a checkout wizard, an editor form, and a SQL query designer.

The out-of-the-box toolkit provides many additional functionalities for API testing, including:

- easy test generation with drag and drop and point-and-click;
- powerful testing with data substitution from files or databases;
- reuse scripts;
- mocks - services using RESTful mocking;
- asynchronous testing.

**License:** Free and Paid (from \$659 per year).

---

Thus, each of these tools allows QA engineers to conduct a complete quality assessment, identify all errors, and bring the software to perfection. However, it's worth noting that smart testing and smart analytics for adaptive and heterogeneous environments are something that has yet to be implemented in modern test automation tools. From our side, we suggest to find a balance between manual and automated tests.

Which tools do or did you use as a tester? What's your opinion about them?

Contact DAS Solutions to test your app and get insights to uncover new opportunities for your business. Reach out to our experts.