



# Introduction to Zoho QEngine

## Overview

Software applications make our lives tremendously easier. People use numerous apps for various needs—like banking, health care, travel, food delivery, or just to play games. Users expect these apps to function without any breakages at every interaction, and on every possible platform, be it mobile or web. As a result, testing apps, or even websites, to ensure users have a decent experience is crucial. Businesses must incorporate software quality assurance as an essential component of software engineering.

However, software quality assurance usually includes various standards, and delivering on those requirements isn't easy when it's all done manually. Testing teams are often faced with hurdles such as shortages of time, system resources, and, most importantly, shortage of personnel resources. Especially in developments where the release frequency is high, testing teams simply don't have enough time for extensive testing, which results in a delayed release or a buggy software.

There is also the probability of human error while testing as specified, leaving us with unreproducible bugs, not to mention the repetitive and monotonous nature of tests. For example, think of a test case where you have to visit a website, supply credentials and log in, click on a tab, ensure the tab opens as expected, enter values to a form, submit the form with different types of values to see if applicable values are accepted or rejected, and then having to do this all over again with different values, and on different platforms, operating systems, and browsers.

For various reasons, manual testing will undoubtedly remain an important practice because of the human element, but it's also true that, alone, it's not sufficient.

This is where test automation comes in. Human effort, when combined with the power of automated testing, provides a significant improvement in the overall testing process. The benefits of automation are two-fold. First, it takes care of common, repetitive testing, and secondly, it allows testers to focus on complex test cases that need in-depth debugging.

## Automation using Zoho QEngine

Zoho QEngine is a test automation tool that lets you configure tests to run automatically with little human intervention needed. It's a completely online tool, which means you don't have to download or set up environments or install anything to get started. The process of automating a test typically consists of a few instructions and

configuration settings. For instance, a simple automated test could be supplying instructions to navigate to a URL, and this action can be automated for various combinations of platforms and browsers.

Test cases can be created and configured by simply clicking buttons, and can be executed on any platform or browser as many times as needed. This not just saves time, but also increases your overall testing efficiency, because more tests can be performed in a shorter span of time.

The tool comes integrated with a powerful scripting language using Java, Javascript, and you can easily drag and drop code blocks to build scripts for device actions. Commands are already present for various actions, so you only need to enter basic data such as the URL address or the button that needs to be clicked. Or better yet, simply press a button to record your actions, and Zoho QEngine will automatically code and build a test case for you. No coding knowledge is needed to automate test runs.

Because testing usually happens with various developers and testers working together on various modules, collaboration is an important factor during testing activities. Zoho QEngine lets you collaborate with your team members when planning and executing test plans. You can invite users associated with the test cases, and you can also assign them different roles, based on which they can perform various actions.

Real-time results are provided on the progress of test runs, and detailed reports help you analyze the root causes of failures, success rates, test duration, and other likely key metrics. Or, you can simply set up notifications to stay updated on the progress of test runs without having to check the reports manually. Additionally, it can push notifications to third-party applications that need these results for further diagnosis.

If you want to run your tests in your local environment instead of running them on the (default) cloud, we've got that covered for you as well.

If you're in a business that requires testing apps (Android or iOS), websites, or APIs, try Zoho QEngine to automate test cases, and let your testers focus on more challenging activities or tests that require a human mind; for example, exploratory or usability testing, thereby maximizing the efficiency of overall testing.

## Features of Zoho QEngine

- **[Manage test cases with ease](#)**: Test case management is easy because a single test case is capable of handling testing in multiple platforms—web, iOS, Android, and API—and for all types of browsers. Automate test cases with simple, point-and-click testing.
- **Mobile testing**: Run tests for mobile application on any mobile device. Mobile tests can be run on the cloud, a locally tethered device, or even a simulator. Rerun existing tests for different mobile platforms or different mobile devices.
- **[Web testing](#)**: Automate the testing of online applications or websites on your desktop or laptop.

- **API testing**: Create API tests, pass response data from one API call to the next, add assertions to validate the response, and more with ease.
- **Record instead of code**: Record a series of actions and Zoho QEngine will generate the code for it. Actions such as website navigation and mouse clicks can be performed once and a test case will be automatically created for you to repeat as many times as you want and on any platform you need.
- **Low-code builder**: Write test cases with the comfort of low-code compatibility. Drag-and-drop tasks to create your own functional flows.
- **Pro-code editor**: Create test cases with ease and more flexibility for your tasks.
- **Execute tests locally**: Execute tests on your local machine by simply installing the agent that comes as a free download with Zoho QEngine.
- **Ease of debugging**: Failure root causes are automatically debugged and kept ready for you to check. You can see where and why the tests are failing, and make changes accordingly.
- **Self-healing**: Reduce the number of failed test cases with this mechanism to self-heal broken locators of the recorded or saved elements in your test cases.
- **Switch environments quickly**: The same test case can be run again for a different environment. No need to re-write or re-create test cases for different environments.
- **Parallel and sequence execution**: Increase testing capacity by running a group of test cases in parallel. Or run them in a sequence depending on the workflow.
- **Powerful reports**: See real-time reports such as test progress, overview of the results, and detailed logs. Easily navigate through the results to see where exactly a test failed. A powerful dashboard gives you a bird's eye view of your test runs, and the graphical display of key metrics provides deep insights on test runs.
- **Collaboration**: Invite team members and assign roles to them for various testing activities.
- **Notifications**: Keep yourself and team members updated with email notifications about test plan completion.
- **Webhook**: Send result notifications to third-party applications.
- **Tunnel**: Create secure connection between your machine and Zoho QEngine's Cloud.