

Test Cases

- Table of contents
- Related Links

Overview

Test cases, simply put, are steps to perform an action. They contain a series of inputs to be provided, and expected outcomes to be validated for an action or a function that has to be tested. This determines whether the system or application being tested falls to comply with the user requirement and standards, while also tracking malfunctions or errors missed during development. For example, a user intends to test the "add to cart" functionality of a website. They start by logging in to the website, then click on the preview button for the products they want to purchase. Lastly, they select the desired product and click **Add to Cart**. In this manner, the user has formulated a test flow for the functionality, employing tasks such as <u>Open URL</u>, <u>Set Value</u>, <u>Click</u>, and more.

Zoho QEngine for different platforms

Zoho QEngine offers the flexibility to create test cases for various platforms through the platform switch option. Users can choose the specific platform they want to test, including <u>Web Browser</u>, Android, iOS, and <u>API</u>. The created test cases are compatible with all selected platforms.

For example, a tester creates test cases to check the login functionality for an application called Zylker Watches. The test cases ensure successful login functionality for both web and mobile platforms. For the web platform, testers will open the website URL, enter valid credentials, click the login button, and verify the user's redirection to the dashboard or homepage, confirming a successful login and relevant user information display.

Similarly, on the Android and iOS apps, testers will input login credentials, tap the login button, and validate navigation to the main screen, addressing platform-specific issues like UI on various screen sizes and compatibility with different device versions.

In API testing, the test case verifies the API response. Testers will send the required parameters (username and password) as part of the API request and verify their response for successful authentication, ensuring secure data transmission, and validating API response formats to detect data validation and error handling issues. This capability ensures efficient test case management across all platforms, streamlining the testing process for comprehensive coverage and consistency.

Why automation for test cases?

There are certain types of test cases for which automation is best suited. For example, tests that have to be repeated multiple times. Such tests are also more prone to mistakes because of their monotonous nature. Similarly, tests that have to be run frequently are not only time-consuming but also require different sets of data most times. Another good pick are the ones that are high risk or have a direct impact on your business. Such tests must be taken up early in the testing process with high priority. UI tests are likely to contain bugs in the first build and are ideal for test cases. Check this page to learn more about what types of tests are ideal for test cases and a strategy to begin with automation.

Before you can begin with creating test cases, you have to <u>create a project</u>. All data, such as test cases, <u>test suites</u>, <u>test plans</u>, test runs, and <u>results</u>, is connected to a project. For example, if a user wants to create test cases that aim to test the functionality thoroughly and performance of an ecommerce application, across web, Android, iOS, and API platforms. This test case data will be associated with a single project that will ensure a seamless user experience and validate the accuracy of data exchanges between different components of the application.

Once a project has been created, you can start adding test cases to the project.

Create Test Case

Now that you have an idea about test cases, let's see the steps to create a new test case inside Zoho QEngine:

1. Navigate to *Test Cases* and click **Create Test Case**.



2. Enter a name for the test case. The link name will be auto-filled with the same name as for test case, but any special characters and spaces will be replaced with underscores (_).

Create I	lest Case ×
News	
Name	
Buy a p	product
Link Nor	ma
	110
buy_a_	product
Module	
incute	
Select	a module or start typing to create a new module V
Descript	tion
Description of the second s	
Descrip	ption cannot exceed 1000 characters
Mark	k test case as a function ?
Crea	ate Cancel
	Create Test Case

Note: The link name is used to refer to test cases or <u>functions</u> inside another test case or existing function.

Before creating a link name, keep the following points in mind:

- The link name must be unique to the function or test case it is associated with.
- The link name should only consist of small letters.
- The link name can be up to 100 characters in length.
- Avoid using special characters other than the underscore (_) in the link name.
- 3. Each test case must be enclosed in a <u>module</u>. The objective of a module is to store together test cases that are essentially a part of the same functionality or process. The test case can be associated with a new module or existing module. To add to an existing module, click on the drop menu, then select the desired one from the list of modules. To add to a new module, start typing the name for the module and click **Add**.

Crea	ate Test Case	×
Nor	me	
	wy a product	
100	kName	
	ev a product	
1000 Sec. 1	alert a mork (a or start twing to create a new mork) a	
sr	Shopping	a
4	Add Shopping	
· · · · · · · · · · · · · · · · · · ·	Mark test case as a function 🛞	
	Create	
	Create Test Case	

4. Provide a description of the created test case. This step isn't mandatory.

ZW	
	Create Test Case
	Name
	Buy a product
	Link Name
	buy_a_product
	Module
	anopping *
	Description cannot exceed 1000 characters
	Mark test case as a function ?
	Create Cancel
	Create Test Case
8	

- 5. Select the **Mark test case as a function** check box, only when you want to create <u>functions</u>. Click **Create**.
- Note: Once a test case is created, you can't convert it into a function, and vice versa. The checkbox will be disabled when you try editing the test case details later.

Methods to write test cases

<u>Creating a test case</u> is the first step in the testing journey, after which we choose the platform (web, Android, iOS, or API) to write the test cases. Zoho QEngine provides three ways to write test cases: Recorder, Editor, and Builder modes.

Recorder

The record feature allows users to record their test cases without manually writing them. This is preferred over scripting for better automated test case creation, as it enables users to create more reliable test cases and ensures comprehensive coverage of all testing scenarios.



For example, a software tester wants to test a *form action* with various input fields and check for its correct data types in a website. The tester can opt to write the test case on their own, but it may be easier to record the test case instead, as it doesn't require manual writing of script.

Interactions with the page are captured as test steps by the recorder. Along with each interaction, the recorder saves the respective elements, which can be reviewed after the recording is complete. After completing the form action, click **Stop** to end the recording session.

Recording a test case feature in Zoho QEngine provides several advantages, including:

- **Faster test case creation**: Testers can create automated tests quickly and easily, without needing to write code manually. This saves time and effort and enables testers to focus on other aspects of testing.
- Accuracy: The test is executed the same way every time, leading to more accurate and reliable results.
- **Re-usability**: Recorded test cases can be reused multiple times, reducing the need to create new tests for similar functionality.
- **Scalability**: Testers can create automated tests that can be executed across multiple platforms and configurations, making it easier to test large or complex systems.
- **Clarity**: It's easier for others to understand what is being tested, as they can see the exact steps and inputs used in the test case.
- **Consistency**: The same steps are followed each time the test is executed, ensuring consistency across different test runs and environments.

• **Maintenance**: This can help simplify maintenance and updates to automated tests, as changes to the system under test can be easily captured and incorporated into the test script. It also records the elements interacted, which are then saved along with its page name.

Editor and Builder

We now know how recording a test case simplifies and expedites the test case creation process, and how they enable users to capture interactions and generate automated test steps effortlessly. However, in some cases, we need a distinct approach to creating test cases. Zoho QEngine provides two modes to write a test case, <u>Editor and Builder</u>, to accommodate any manual edits to recorded test cases.

- Editor: Automated smart editor, that favours the scripting experts to create the most flexible test flows.
- Builder: Simplified task blocks are used to create test flow with ease, for users without scripting expertise.



Test Cases Best Practices

- Activity-specific test cases are the way to go
- Check if similar test cases exist before creating new ones
- Use comments to provide as much information as possible for the tests
- Maintain test cases by periodically checking, optimizing, or deleting them

Related Links

- <u>Test Case Actions</u>
- Understand Web Testing
- <u>Understand API Testing</u>

https://help.zoho.com/portal/en/kb/qengine/user-guide/test-cases/test-cases/articles/test-cases