

Create Data-Driven Test Cases

- Table of contents
 - 1. Overview
- 2. Create data-driven test cases

3.2

▲ 4. Modify the data source in a test case after creation

5.

1. Overview

Data-driven testing allows you to separate test logic from test data, enabling a single test case to run multiple times with different input values. Zoho QEngine streamlines this process, ensuring your application behaves as expected under various conditions and inputs. To learn more about data-driven testing, refer to <u>Understand Data-Driven Testing</u>. <u>Data sources</u> play a critical role in the testing process, as they contain the input values used for each test iteration.

<u>Test cases</u> can be configured to utilize the required <u>data source</u> containing the input values during execution. Parameters of the selected data sources can be referenced within the testcases by supplying as arguments to any <u>task</u>. As the test case iterates through the data source, parameters in the test case are dynamically replaced by the corresponding values from the data sets stored in the selected data source. Upon completion, a test case summary is generated, offering a comprehensive analysis that includes the overall results and detailed logs

for each iteration. When these data-driven test cases are incorporated into a test plan, they are treated as a single test case, with the results page displaying iteration logs for each data set used.

Note: Data-driven testing is supported on both <u>web</u> and <u>mobile</u> platforms.

2. Create data-driven test cases

Follow the steps below to create data-driven test cases.

1. Click Create Test Case.

zw	Test Cases Manage	Employee Login		+ Create Test Case
	Search Q 7		Record Web Browser V	 Draft
Test Cases Test Cases Test Suites Test Plans Test Plans Results Co Users OS Settings	Search Q Compose Portal Compose Login	Ceneral Open URL Click Set Value Assert Text Assert Value Wait Form Actions Select Deselect Check Uncheck	Record Web Browser Employee Login Elit Data Source openurl("https://zwatch.zohocommerce.com/login","some window"); setValue("/html/body/div[2]/form/ul/div[3]/li/div/input",@full_Name);	
•		Clear Upload Assertion		😫 Save 💿 Run 🔻

2. Enter the test case details, such as *Name*, *Link Name*, and associate it with the required *Module*. Additionally, providing a *Description* helps you get an overview of the test case, but isn't mandatory.

ZW	
Test Cases	Create Test Case X
	Name
est Suites	Employee Attendance
	Link Name
est Plans	employee_attendance
A	Module
Results	Employer Portal/
	Description
Users	
in an	
ettings	Mark test case as ?
	None function Data-driven testing
	Create

3. Select **Data Driven Testing** from the **Mark Test Case As** section to convert the test case into a data-driven test case.

Create Test Case Create Test Case Name Employee Attendance Link Name employee_attendance Link Name employee_attendance Module Employer Portal/ Description	
Create Test Case Name Employee Attendance Link Name employee_attendance Module Employer Portal/ Description	
Create Test Case Name Employee Attendance Link Name employee_attendance module Employer Portal/ Description	
Create Test Case Name Employee Attendance Link Name employee, attendance Module Employer Portal/ Description	
Name Employee Attendance Eink Name employee_attendance Module Employer Portal/ Description	
Employee Attendance Employee Attendance Link Name employee_attendance Module Employer Portal/ Description	
Link Name employee_attendance Module Employer Portal/ Description	
Test Plans employee_attendance Module Employer Portal/ Bescription Description	
Module Employer Portal/ Observiption	
Results Employer Portal/	
Description	
Users	
Settings Mark test case Use diverse data sets to perform iterative testing	
None function Data-driven testing	
Data Source	
Create	

4. Select a data source from the **Data Sources** list.

Alternatively, you can select the data source from the global variable list to enable test case execution across different environments. By creating environment-specific data source variables and a corresponding global variable with the same name, the appropriate data source is dynamically referenced based on the selected environment during execution.

If you don't have a data source created or need a new one, click **Create Data Source**.

₽Ť	< All Test Cases		Search	+ New Test Case	
		Create Test Case	×		Modified by
		Name Data driven III test	lgado		
		Link Name	n		
		data_driven_ui	mes		
		Module	reips		
		uì test 🗸 🗸	æ		
		+ Create Data Source login using test account file			
		Form_actions_list_pdf	iennings.		
		Variables data source variable ୬୦			
		Form actions list pdf	iner		
		Select data source file	etcher		
		Select Row Iteration Type	Sims		
		Data Set Name ~	dy		
		Row Starts From Row Ends At			
		Create Cancel	15		

5. Select a **Row Iteration Type** to define how <u>data sets</u> are displayed in <u>live preview of test cases</u> or in <u>results</u> <u>page of test plans</u>. This choice controls the display format of iteration logs, showing them by *Data Set Name, Set Number*, or a combination of both.

zw	Test Cases Manage	Employee Login	+ Create Test Case
		Im IP A Im Record I Web Browser V	🕞 💿 Draft 🗡 🛅 层
Fo Test Cases O Test Suites Test Plans		General Create Test Case × Open L Employer Portal/ ✓ Click Description ✓ Set Vali ✓ ✓	
Results		Assert Mark test case as ? Mark test case as ? None function Data-driven testing Form Act Deta Source Employee Details	
ିର୍ତ୍ତ Settings		Check Row Iteration Type Uncheck Set No Clear Start Iteration From Upload 4 Assertion Create Cancel	
		Accesta	🖹 Save 🕑 Run 👻

6. Specify the **Start Iteration From** and **End Iteration At** fields. They define the range of iterations by indicating where the iteration begins and ends within your data sets.

zw	Test Cases Manage	Employee Login	+ Create Test Case
		🔟 🖻 🕰 💽 Record 🗆 🖵 Web Browser 🗸 🗸	• Draft 🕥 🛅 层
E Test Cases	Employer Portal Employer Locia	General Create Test Case ×	
ð	🧫 Employee Login	Open U Employer Portal/	
Test Suites		Description Set Value	
Test Plans		Assert	
<₽		Assert Mark test case as ?	
Results		Wait None function Data-driven testing Form Act Image: Comparison of the state of the	
Users		Select Employee Details	
ති		Deseler Row Iteration Type	
Settings		Uncher Set No ~	
		Clear Start Iteration From End Iteration At	
		Assertion	
			🖹 Save 🕑 Run 👻

7. Once the required fields are filled, click **Create**.

3. Refer data sources in test cases

Now that you've learned how to <u>create a data-driven test case</u>, let's see how to reference data stored in <u>data</u> <u>sources</u> within your data driven test cases.

3.1 Using the Editor mode

The <u>parameters</u> created can be used inside test cases using the symbol "@". As you type "@", all the parameters from the data source used for the creation of the test case will be auto-suggested. Choose the required one to use.



3.2 Using the set expression pop up in Builder mode

The parameters can also be used with the <u>Set Expression pop-up</u> by clicking on a task in Builder mode.

- 1. Choose the desired parameter from the **Data Source Variables** list.
- 2. Click **Done**. Now, the parameter values will be automatically supplied to the value field of the selected task.

ZW	Test Cases Manage	Employee Login $ imes $	Employee Att \times	+ Create Test Case
	Search Q 7		Record Web Browser	 Draft
Test Cases	Y 🖻 Employer Portal	General	Employee Attendance 🔗 Edit Data Source	
	🔓 Employee Attendance	Open URL	1 - O Open URL "https://zwatch.zohocommerce.com/contact" "same window"	🧬 Set Value 👘
Test Suites	🛆 Employee Login	Click	2 Castilates Margula and Set Expression	Locator
		Set Value	Prull_Name Prull_Name	/ntmi/body/div[2]/form/di/div[3]
Test Plans		Assert Text		Value
6		Assert Value	Veriables Experience	@Full_Name
Results		Wait		
0)		Form Actions	Search 7	
()) Users		Select	No data available	
		Deselect		
ری Settings		Check	Data Source Variables	
		Uncheck	ForeCast_Failure	
		Clear	Data_Set_Name	
		Upload	Full_Name	
		Assertion	Job_Title	
0	+ Add Module	Accort Solootod	Done	🖹 Save 💿 Run 🔻

4. Modify the data source in a test case after creation

The Edit Data Source option lets you modify the data source referenced within a test case.

1. Click Edit Data Source.

zw	Test Cases Manage	Employee Login $ imes$	Employee Att* \times			+ Create Test Case
	Search Q 7		Record	🖵 Web Browser	~	Not Saved 😽 🔸 Draft 🗡 🛅 层
Eo Test Cases	💛 🗁 Employer Portal	General	Employee Attendance	🖉 Edit Data Source		
Test Cases	🔓 Employee Attendance	Open URL	1 — 🗇 Open URL	"https://zwatch.zohocommerce.com/contact"	"same window"	🧬 Set Value 👘
C Test Suites	🗁 Employee Login	Click				Locator
		Set Value	2 – 🦨 Set Value	"/html/body/div[2]/form/ul/div[3]/li/div/input"	@Full_Name	"/html/body/div[2]/form/ul/div[3]
Test Plans		Assert Text				Value
		Assert Value				@Full_Name
Results		Wait				
0)		Form Actions				
Users		Select				
5 2		Deselect				
Settings		Check				
		Uncheck				
		Clear				
		Upload				
		Assertion				
		Accert Selected				🖹 Save 🕑 Run 👻

2. You can edit the data source related fields, such as the **Data Source**, **Row Iteration Type**, **Start Iteration From**, and **End Iteration At**.

Employee Details		~
Start Iteration From	End Iteration At	
1	4	

3. Click Save.

Note:

- 1. Data source modifications done post creation of a test case are specific to the respective platforms (web, android, iOS, or API).
- 2. After updating the data source in the test case, ensure the parameters in the test case match those in the updated data source.

5. Related Links

- <u>Test Cases</u>
- <u>Understand Data-Driven Testing</u>
- <u>Create and Manage Data Source</u>

6. What's Next?

Next Steps

Now that you've created your data-driven test cases, explore how to run the test cases and view their

live preview or test plan executions.

Previous Steps

Before diving into creating data-driven test cases, ensure you're familiar with how to create data

sources.