



Qualys Browser Recorder

User Guide

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Preface

Welcome to Qualys Browser Recorder! This user guide describes how to install Qualys Browser Recorder extension in your Chrome browser.

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About Qualys

Qualys, Inc. (NASDAQ: QLYS) is a pioneer and leading provider of cloud-based security and compliance solutions with over 9,300 customers in more than 100 countries, including a majority of each of the Forbes Global 100 and Fortune 100. The Qualys Cloud Platform and integrated suite of solutions help organizations simplify security operations and lower the cost of compliance by delivering critical security intelligence on demand and automating the full spectrum of auditing, compliance and protection for IT systems and web applications. Founded in 1999, Qualys has established strategic partnerships with leading managed service providers and consulting organizations including Accenture, BT, Cognizant Technology Solutions, Fujitsu, HCL Comnet, HPE, Infosys, NTT, Optiv, SecureWorks, Tata Communications, Verizon and Wipro. The company is also a founding member of the [Cloud Security Alliance \(CSA\)](#).

For more information, please visit www.qualys.com

Get Started

Thank you for your interest in Qualys Browser Recorder!

This document tells you all about Qualys Browser Recorder. We'll tell you about the requirements, Installation Steps, Uninstallation Steps, features and more.

Introduction to Qualys Browser Recorder

Qualys Browser Recorder is a free browser extension to record & play back scripts for web application automation testing. Qualys Browser Recorder includes the entire Selenium Core, allowing you to capture web elements and record actions in the browser to let you generate, edit, and play back automated test cases quickly and easily. It also allows you to select a UI element from the browser's currently displayed page and then select from a list of Selenium commands with parameters.

Let's see how Qualys Browser Recorder evolved:

- Qualys Web Application Scanning (WAS) supported playing back scripts recorded from the old Selenium IDE Firefox extension, which broke when Firefox 55 was released
- the scripts allow the scanner to navigate complex authentication and workflows
- this new Chrome extension is designed to be essentially a more powerful and modern replacement for Selenium IDE
- it's designed to be compatible with existing scripts recorded originally from Selenium IDE

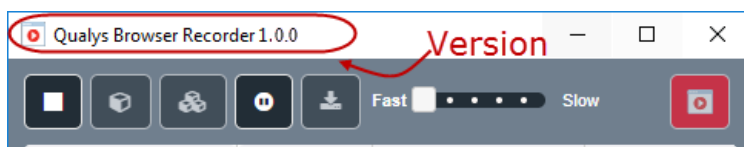
Qualys Browser Recorder Features

Qualys Browser Recorder was developed based on Web Extensions API and supports running on Chrome browser. It retains all the features of the Selenium IDE and provides numerous advanced enhancements.

- Allows you to save test case scripts in HTML format
- Easy to use interface style and locators with target element selection.
- Supports opening, editing and running multiple test suites in one panel.
- Supports automatic triggering of test suites and processing them sequentially.

Qualys Browser Recorder Version

You can easily locate the version of Qualys Browser Recorder above the toolbar.



Installation

It's easy to install Qualys Browser Recorder. We'll walk you through the steps quickly.

[Qualys Browser Recorder Pre-requisite](#)

[Installing Qualys Browser Recorder](#)

[Uninstalling Qualys Browser Recorder](#)

Qualys Browser Recorder Pre-requisite

You just need to download and install the latest version of the Chrome web browser.

The user needs to be aware of basics of Javascript and HTML concepts to execute effective and successful automation test scripts.

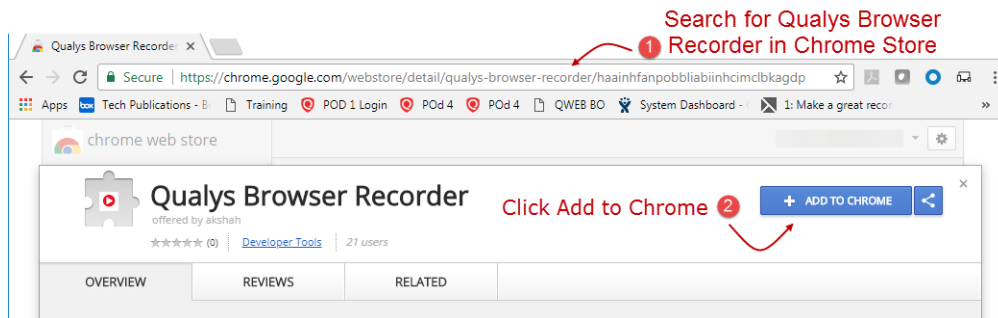
Installing Qualys Browser Recorder

Here are the steps for quick installation of Qualys Browser Recorder:

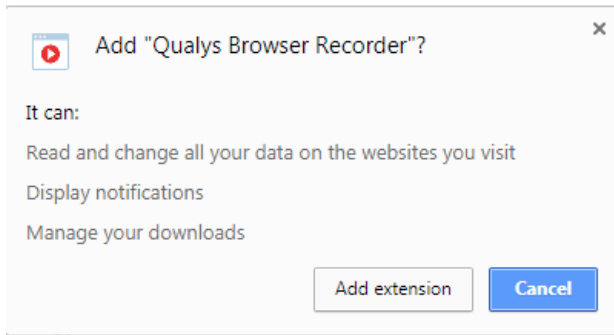
Step 1: Open the Google Chrome browser and go to Chrome Store. Search for Qualys Browser Recorder in the Chrome store.

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Step 2: Once the web page is loaded, click Add to Chrome.

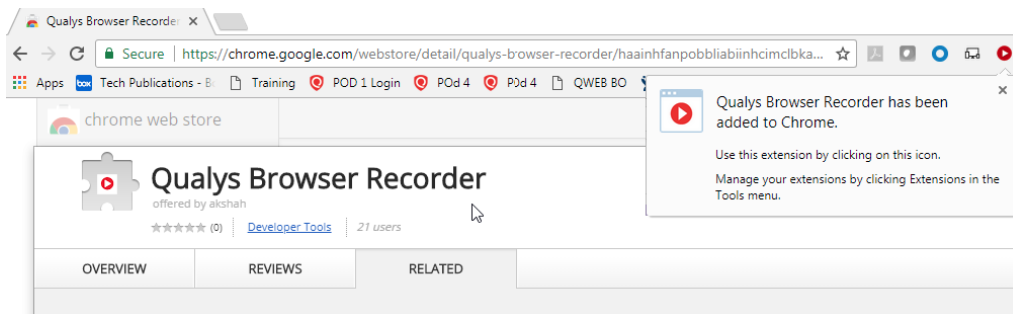


Step 3: Click Add extension in the new pop-up window that is displayed.




What happens next?

As soon as you complete the installation steps, a small pop window is displayed indicating Qualys Browser Recorder has been successfully added to your browser.

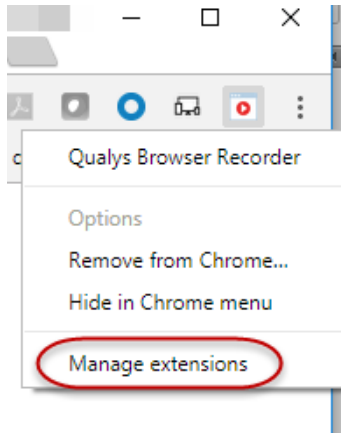


How do I access Qualys Browser Recorder?

Simply click the Qualys Browser Recorder icon  in the menu bar to access and use Qualys Browser Recorder anytime you want.

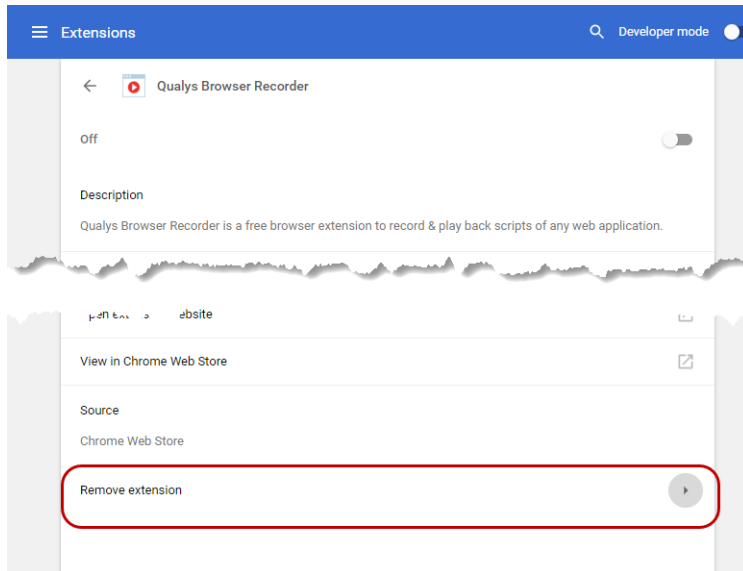
Uninstalling Qualys Browser Recorder

Step 1: Open Chrome browser and right-click on Qualys Browser Recorder icon in the menu bar, and simply select Remove from Chrome or select Manage Extensions.

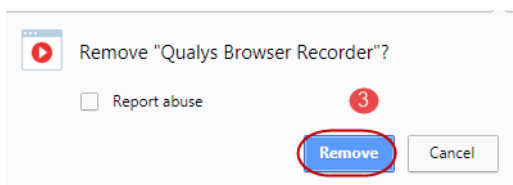


The Extension web page opens with Qualys Browser Recorder extension selected.

Step 2: Click Remove extension icon located at the bottom of the page.



Step 3: Click Remove in the Confirm Removal pop up window.



Qualys Browser Recorder User Interface

Let us get familiar with the various tools, panes and menu options that Qualys Browser Recorder provides us:

[Tool Bar](#)

[Test Suite Pane](#)

[Editor Pane](#)

[Log Pane](#)

[Reference Pane](#)

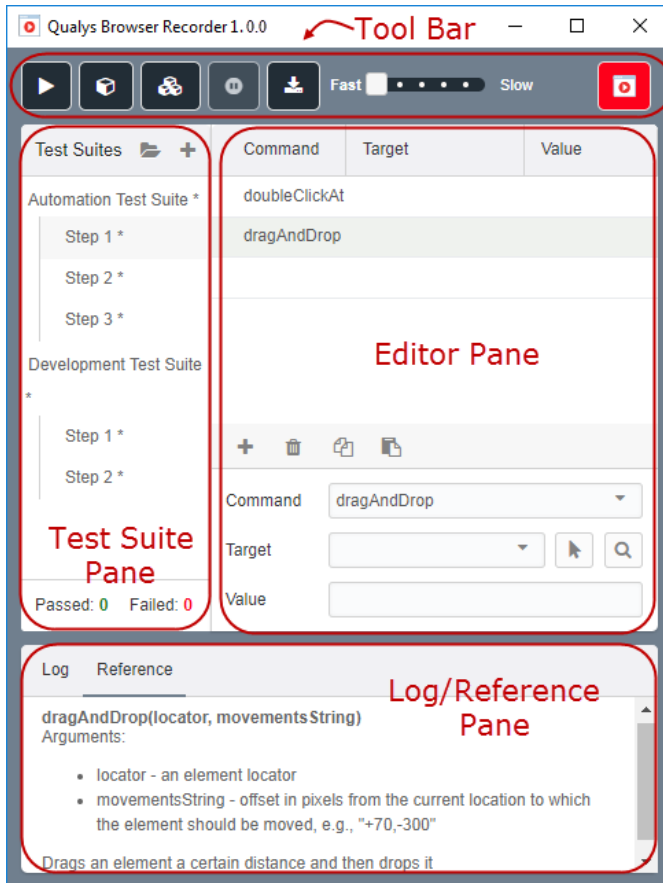
[Download Pane](#)

[Hot Keys](#)

[Commands Supported](#)



Knowing Qualys Browser Recorder






Let's take a look at the various panes and toolbar options in Qualys Browser Recorder.



Tool Bar

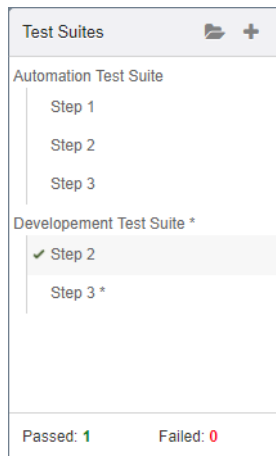
Become familiar with the toolbar buttons.

Icon	Name	Description
	Record	Starts and ends your recording session. Each browser action is entered as a Selenium command in the editor.
	Playback Speed	Controls the speed of your text script execution.

Icon	Name	Description
	Play Current Test Case	Sequentially plays all the test cases of selected test suite listed in the Test Suite pane.
	Play Current Test Suite	Sequentially plays all the test suites listed in the Test Suite pane.
	Play Entire Test Suites	Stops your playback.
	Pause/Resume	Pauses or resumes your playback.
	Download	Allows you to display, copy and save the selected test case script in HTML format. Note that Selenium IDE HTML format must be used for compatibility with Qualys Web Application Scanning (WAS).

Test Suite Pane

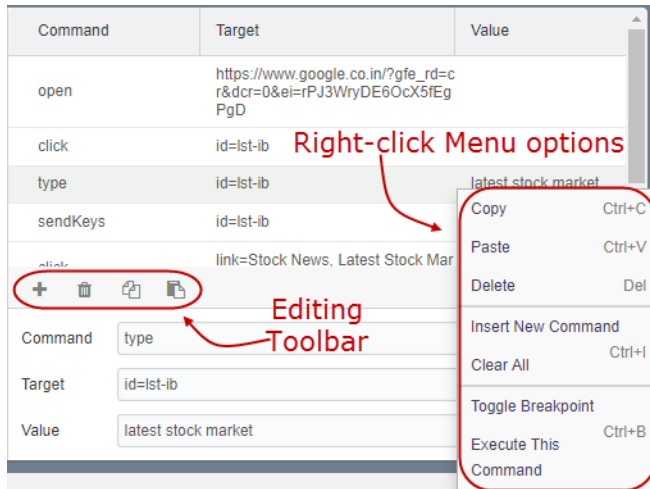
The Test Suite pane is where you'll view your test suites and test cases.



- Open more than one test suite at a time.
- View the list of currently opened test suites.
- When you open a test suite, the test suite pane will automatically list all the test cases contained in it.
- The highlighted test case is the currently selected test case. After playback, each test case has correct or wrong sign icon to represent if it has passed or failed respectively. At the bottom portion is a summary of the number of test cases that were run and failed.





Editor Pane

You can think of the editor pane as the place where all the action happens. This is where you create and modify test case commands. After playback, each step is color-coded.



The Command, Target, and Value entry fields display the currently selected command along with its parameters. These are entry fields where you can modify the currently selected command. You can select a command and use the right-click menu options or editing toolbar to achieve various tasks such as copying the command, inserting new command or clearing all the commands, executing the command, and so on.

Editing Toolbar

Icon	Name	Description
	Add	Inserts a command
	Delete	Deletes the selected command.
	Copy	Copies the selected command
	Paste	Pastes the copied command

Log Pane

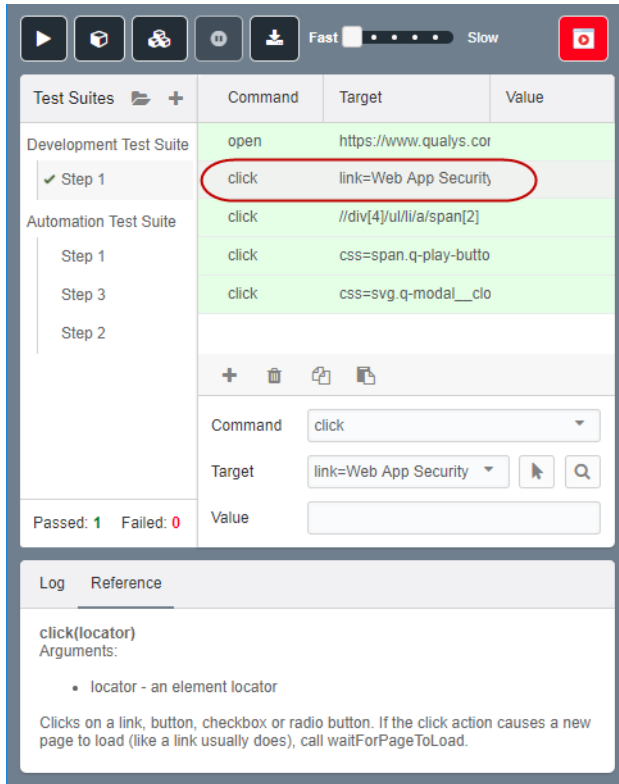
The Log pane displays runtime messages during execution. It provides real-time updates as to what Qualys Browser Recorder is doing.



These messages are often useful for test case debugging. You can clear the logs by clicking the clear logs button.

Reference Pane

The Reference pane shows a concise description of the currently selected command in the Editor pane. It also shows the description about the locator and value to be used on that command.

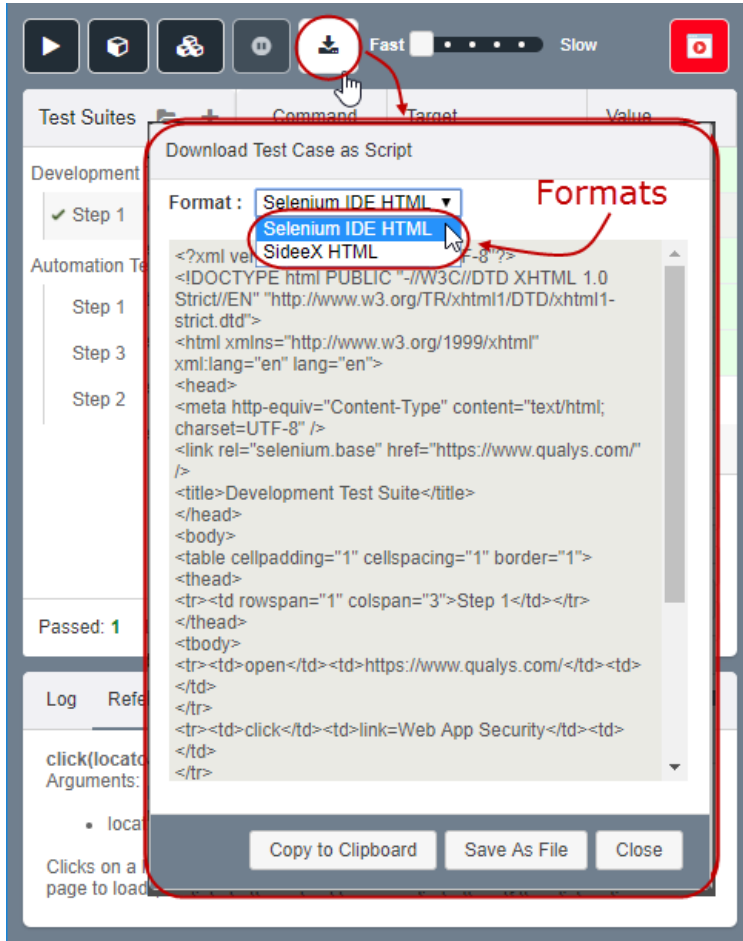


The number of parameters provided must match the number specified, the order of parameters provided must match the order specified, and the type of parameters provided must match the type specified. If there is a mismatch in any of these three areas, the command will not run correctly.

Download Pane

The Download pane allows you to copy and save a test case in its raw form. Currently, two file formats are supported: Selenium IDE HTML and Sidex HTML format. By default, scripts are downloaded in Selenium IDE HTML format. Note that Selenium IDE HTML format is required for compatibility with Qualys Web Application Scanning (WAS).

To view the test case in its native form, click the download button on the toolbar. Click the Format drop-down to switch and change the HTML format.



It displays the test case in the native format (HTML) in which the file is stored.

Hot Keys

You could try some of the shortcut keys for common actions. Try it out.

Keys	Description
Ctrl + S	Save a test suite.
Ctrl + O	Open a test suite.
Ctrl + P	Play this test case.
Ctrl + I	Insert a new command.
Ctrl + A	Select all commands.
Ctrl + X	Cut a command.
Ctrl + C	Copy a command.
Ctrl + V	Paste a command.
Del	Delete the selected command (s).
Ctrl + B	Toggle a breakpoint.

Commands Supported

We provide over 500 commands in Qualys Browser Recorder. However, we are listing the most commonly used commands required for building a test case.

Command	Description
open	Opens an URL in the test frame. This accepts both relative and absolute URLs. The "open" command waits for the page to load before proceeding, ie. the "AndWait" suffix is implicit.
click	Clicks a link, button, checkbox or radio button. If the click action causes a new page to load (like a link usually does), call <code>waitForPageToLoad</code> .
<code>waitForPageToLoad</code>	Waits for a new page to load.
<code>waitForElementPresent</code>	Verifies that the specified element is somewhere on the page.
<code>verifyText</code>	Gets the text of an element. This works for any element that contains text. This command uses either the <code>textContent</code> (Mozilla-like browsers) or the <code>innerText</code> (IE-like browsers) of the element, which is the rendered text shown to the user.
<code>sendKeys</code>	Simulates keystroke events on the specified element, as though you have typed the value key-by-key.
<code>type</code>	Sets the value of an input field, as though you have typed it in.
<code>pause</code>	Wait for the specified amount of time (in milliseconds).
<code>mouseOver</code>	Simulates a user hovering a mouse over the specified element.
<code>verifyTextPresent</code>	Verifies that the specified text pattern appears somewhere on the rendered page shown to the user.
<code>selectFrame</code>	Selects a frame within the current window.

Building Test Cases

You could build a test case from scratch involving the following steps:

[Step 1: Recording](#)

[Step 2: Editing](#)

[Step 3: Saving a test case](#)

[Step 4: Running test cases](#)

[Example](#)

Step 1: Recording

Many first-time users begin by recording a test case from their interactions with a website. When you open Qualys Browser Recorder, the record button is at the upper right corner. Click the record button and it will start recording your actions.

During recording, Qualys Browser Recorder automatically inserts commands into your test case based on your actions. Typically, this may include:

- clicking a link - click or clickAndWait commands
- entering values - type command
- selecting options from a drop-down listbox - select command
- clicking check boxes or radio buttons - click command

Step 2: Editing

Once you complete recording the interactions, you could either edit the commands or insert new commands.

Inserting a Command

Select the command and then right-click and select Insert Command from the right-click menu; the Qualys Browser Recorder will add a blank line just below the line you selected. Alternatively, you can click '+' in the Editing toolbar.

Now, use the command editing text fields to enter your new command and its parameters.

Editing a Command

Simply select the line to be changed and edit it using the Command, Target, and Value fields.

Step 3: Saving a test case

Qualys Browser Recorder distinguishes between test cases and test suites. You can add one or more test cases and form a test suite.

To save your tests for later use you can either save the individual test cases, or add the test cases to a test suite and then save the test suite. If the test cases of your test suite have not been saved, you'll be prompted to save them before saving the test suite. To save a test case/suite - in the 'Test Suite' pane, select the test case/suite and then right-click on particular test case/suite to save.

To open a test case/suite in the 'Test Suite' pane, click Open Test Suites on the toolbar, which lets you browse your existing file and when you open an existing test suite, Qualys Browser Recorder displays its commands in the command Pane.

Step 4: Running test cases

Qualys Browser Recorder allows many options for running your test case. You can execute a test case all at once, stop and start it, run one line at a time, run a single command you are currently developing, and you can do a batch run of an entire test suite. Execution of test cases is very flexible.

Run a Test Case

Select the test case and click the play button to play the current test case

Run a Test Suite

Select the test suite and click the play button to execute all the test cases in the currently loaded test suite.

Stop and Start

The Play button toggles between play and stop. When you execute the test case, you can use the same button to stop the test case while it is being executed. When you stop the test case, use the same stop button now to play the test case.

Stop in the Middle

You can set a breakpoint in the test case to cause it to stop on a particular command. This is useful for debugging your test case. To set a breakpoint, select a command, right-click, and select Toggle Breakpoint.

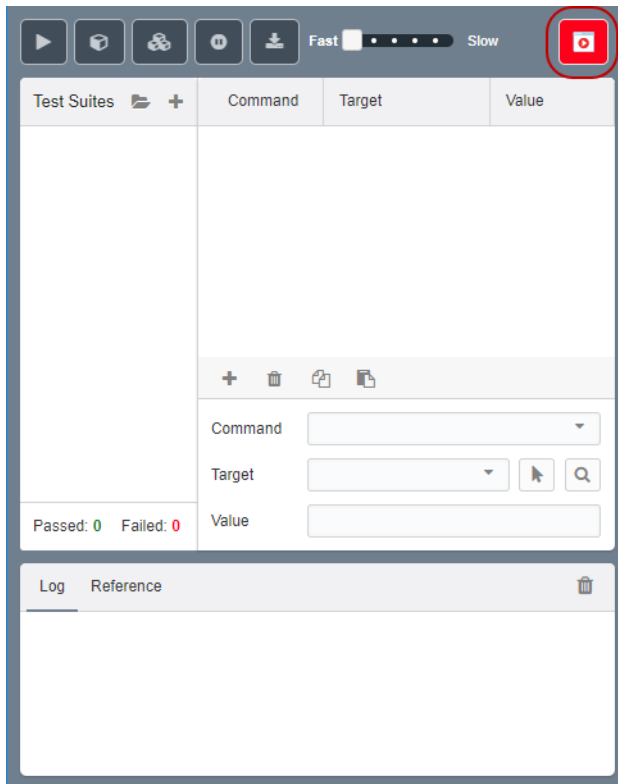
Run Any Single Command

Click any single command on command pane and then right-click and select 'Execute this command'. This is useful when you write a single command. It lets you immediately test a command you are constructing. You can run single command to see if it runs correctly.

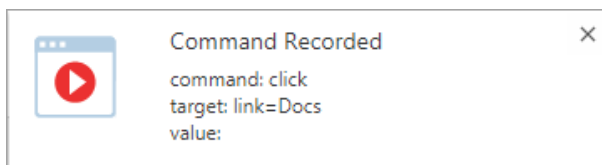
Example

Let us build a sample test case to understand the sequence better. For example, let us record the steps needed to Qualys website.

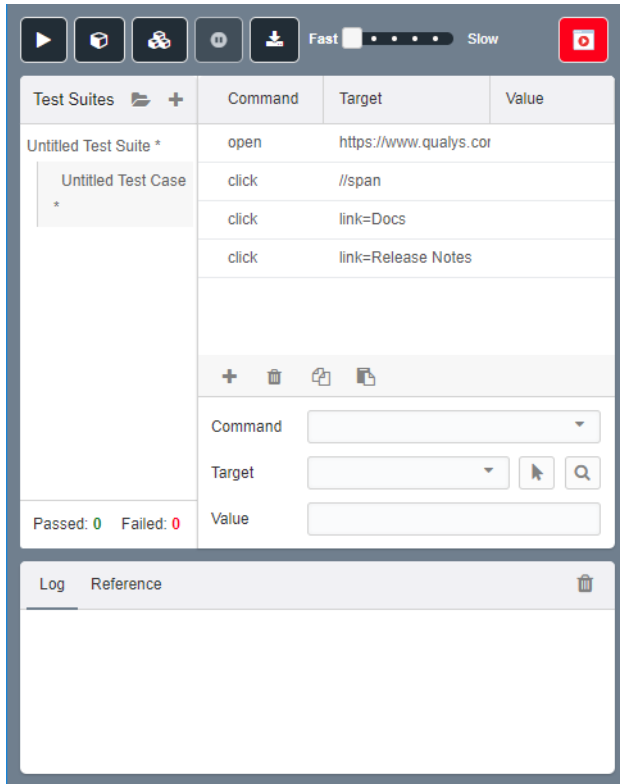
Step 1: Open Qualys Browser Recorder and click Record.



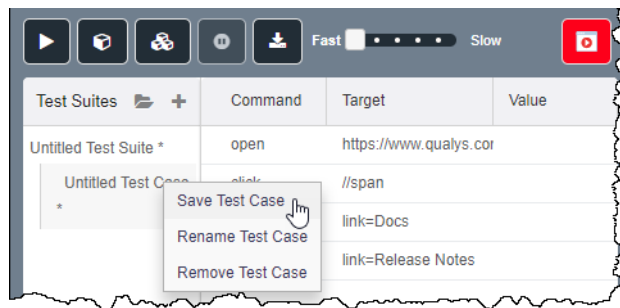
Step 2: Type the URL in the browser in the browser and perform few clicks. For every click, Qualys Browser Recorder displays a prompt on the screen.



Step 3: After you complete the sequence of clicks, click Record button to stop the recording. Qualys Browser Recorder automatically populates all the actions in the editor pane.



Step 4: Save the test case and test suite.



Step 5: You can now replay the recorded steps. the background will change to light green color if the script gets executed successfully and the log statement gets printed.

