



UNIVERSITY OF SCIENCE
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Test Automation Tutorial Katalon Studio

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Topics covered

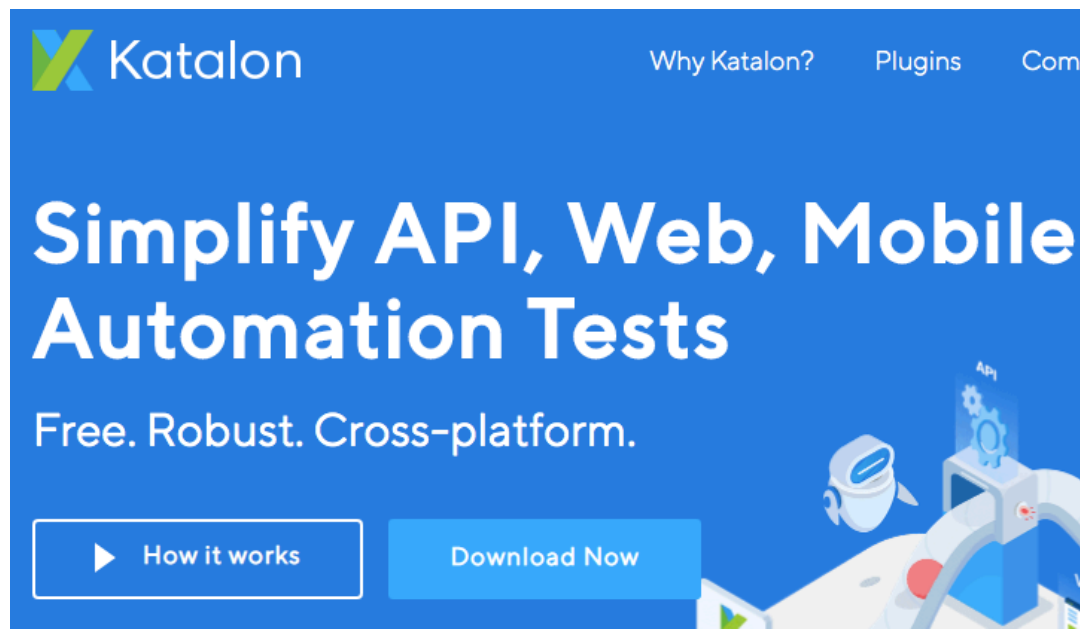
- Overview of Katalon Studio
- Web-based automation testing
- API test automation

Katalon Studio

- Overview
- Katalon Studio installation and setup
- Key features
- Test project structure
- Katalon Studio versus Selenium and Appium
- Groovy scripting language

Katalon Studio Overview

- A powerful and comprehensive tool for test automation
- A product of Katalon Studio LLC, a subsidiary of KMS Technology
- Developed in VN
- Katalon.com
- > 400K users



Katalon Studio Overview - 2

- Built on top of Selenium and Apium
 - ❑ It uses Selenium and Appium frameworks
 - ❑ Much easier to use than Selenium and Appium
 - ❑ Everyone can quickly use the tool
- Supports Web, Mobile and API test automation
- It is a free tool for individual use
 - ❑ The company makes money buy selling services and plugins

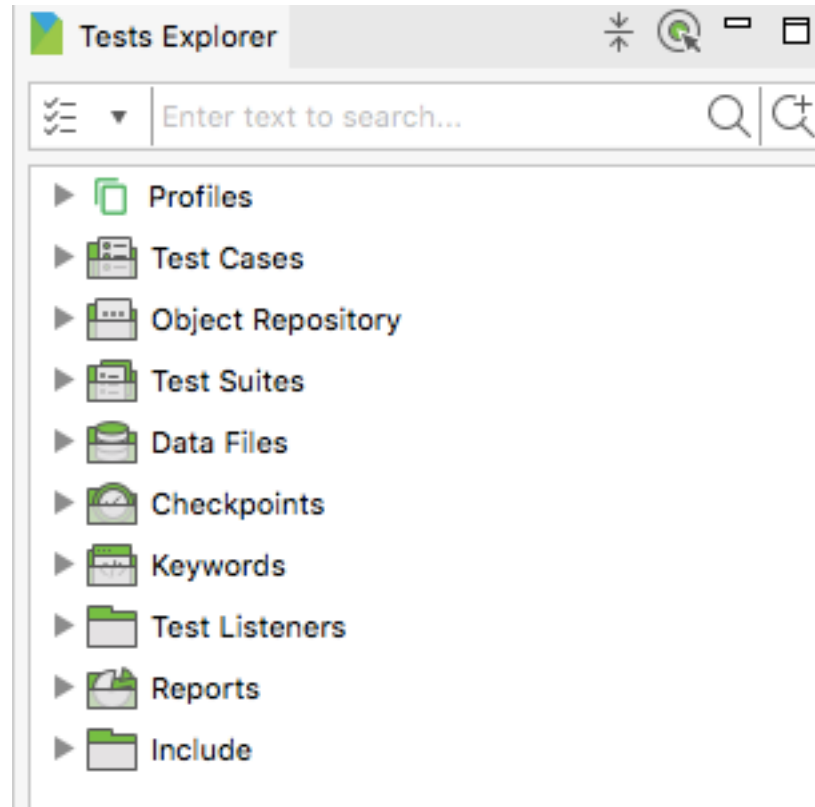
Installation and setup

- Create an account from katalon.com
- Download
- Activate and run

Key features

- All key features for creating, running, reporting, maintaining tests
- Web, Mobile, and API automation tests
- Record/playback
- Integration with many tools such as Git, Slack, Bitbucket, JIRA
- Analytics

Test Project Structure



Katalon vs. Selenium and Appium

- Katalon is built using Selenium and Appium engines
- Selenium for Web, and Appium for Mobile
- Katalon makes test automation easier
 - Users do not need to build a framework using Selenium or Appium
 - Users do not need to integrate many tools
 - Everyone can get started quickly
- To use Selenium and Appium, users need to have good programming skills
- For more information visit [Katalon vs. open-source frameworks](#)

Groovy Scripting Language

- Katalon uses Groovy for its test scripts
- Groovy is a scripting language based on Java
- Syntax is similar to Java
 - But less complex than Java

Web-based Automation Testing

- ❑ Configuration for Web testing
- ❑ Record and Playback test generation and execution
- ❑ Test execution configuration
- ❑ Object repository
- ❑ Keyword-driven testing
- ❑ Linear test scripting
- ❑ Data-driven testing
- ❑ Built-in statements: binary, control, assertion statements
- ❑ Built-in and custom keywords

Create test cases

- <https://docs.katalon.com/docs/author/create-test-cases/create-test-case-overview>

Record and Playback

- Test case: create an appointment at <http://demoaut.katalon.com/>

Data-driven Tests

- Data stored in list, csv, Excel files or databases
- Create test cases
- Use variables in test cases
- Create a test suite to bind variables to data columns
- <https://docs.katalon.com/docs/author/data-driven-testing/data-driven-testing-with-katalon-studio>