

Running Unit Test on JSTestDriver

JavaScript unit tests are run in a browser against a test server which actually handles the testing process.

This server allows you to capture a browser to run tests in, loads the test targets to the captured browser, controls the testing process, and exchanges data between the browser and IntelliJ IDEA, so you can view test results without leaving the IDE.

The test server does not necessarily have to be on your machine, it can be launched right from IntelliJ IDEA through the *JSTestDriver test runner*.

The test server loads tests to the browser according to the [configuration files](#) that define which test and corresponding production files should be loaded and in which order. JSTestDriver server treats *.jstd and *.conf files as test runner configuration files. Create one or several configuration files in advance manually and then specify them in the [run configuration](#).

To get access to using the test server, [download](#), [install](#), and [enable](#) the *JSTestDriver plugin* from the [JetBrains default repository](#). Then restart IntelliJ IDEA for the changes to take effect.

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Creating a test runner configuration file manually

A test runner configuration file defines which test and corresponding production files should be loaded and in which order. Any file with the extension *.jstd or *.conf is treated as a test runner configuration file.

1. In the **Project** tree, select the parent folder of the `src` (production) and the `test` folders, and choose **New | File** on the context menu.
2. In the **New File** dialog box, that opens, type a name of the configuration file with the extension `jstd` or `conf`.
3. Open the new file in the editor and specify the full path to the current folder and paths to the files to load relative to the current folder. Use wildcards to specify file name patterns. The required format is [YAML](#), for more details, see [description of test runner configuration files](#).

Starting a IntelliJ IDEA default JSTestDriver test server

If you are going to use a test server running on another machine or listening to another port, start it according to the server-specific instructions and specify its URL address in the **Server** area of the [Run/Debug Configuration: JSTestDriver](#) dialog box.

1. Make sure the JSTestDriver [plugin is enabled](#) and at least one test runner configuration file is available in the project.
2. Open the [JSTestDriver Server](#) tool window by doing one of the following:
 - On the main menu, choose **View | Tool Windows | JSTestDriver Server**.
 - Click the **Run** button  on the toolbar, and then click the **Start a local server** link in the pop-up window that opens.
3. In the [JSTestDriver Server](#) tool window, that opens, click the **Run a local server** toolbar button .

To stop the server when you are through with unit testing, click the **Stop the local server** toolbar button .

Capture a browser to execute tests in

1. [Start the JSTestDriver Server](#) if it is not running yet, and then switch to the [JSTestDriver Server](#) tool window.
2. To start a local browser with the **Remote Console** of the [JSTestDriver](#), do one of the following:
 - Click the icon that indicates the browser of your choice.
 - If the browser is already opened, copy the contents of the **Capture a browser using the URL** read-only field and paste the URL in the address bar.

In either case, the icon that indicates the chosen browser becomes active.

You can have several browsers captured. However if you are going to debug your unit tests, you will have to appoint a browser for debugging in the **Debug** tab of the [Run/Debug Configuration: JSTestDriver](#) dialog box.

3. Switch to the [JSTestDriver Server](#) tool window and click the icon that indicates the browser you just opened. IntelliJ IDEA displays a message informing you that it is ready for executing tests.

Creating a JSTestDriver run configuration

1. Open the [Run/Debug Configuration](#) dialog box by doing one of the following:
 - On the main menu, choose **Run | Edit Configurations**.
 - Press `RunConfiguration` and choose **Edit Configuration** on the context menu.
 - Open the test file in the editor, and then choose **Create <file name>** on the context menu.
 - Select the test file in the **Project** tool window, and then choose **Create <file name>** on the context menu of the selection.
2. Click the **Add** button  on the toolbar and select the [JSTestDriver](#) configuration type.
3. In the dialog box that opens, specify the test scope, configuration parameters, and activities to perform before test execution.
4. Apply the changes and close the dialog box.

Launching unit tests

1. To launch the tests according to a run configuration, select the **JSTestDriver** run/debug configuration from the list on the main toolbar. Then click the **Run** button  to the right of the list.
2. To launch a single test, open the test file in the editor and click the blue arrow icon  in the gutter area next to the text to run.

The arrows appear only if the test framework used in your tests is [associated with the project](#), so IntelliJ IDEA can recognize the tests.

3. Monitor test execution in the **Test Runner** tab of the **Run** tool window as described in [Monitoring and Managing Tests](#).

See Also

Procedures:

- [Preparing to Use JSTestDriver Test Runner](#)
- [Testing Frameworks](#)
- [Running, Debugging and Testing](#)
- [Testing](#)

Reference:

- [Run/Debug Configuration: JSTestDriver](#)

Web Resources:

- [Developer Community](#) 