MultiBrowser Documentation

Release 10.0.0

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Homepage

MultiBrowser is a client side cross browser testing tool. It runs natively on Windows, macOS and Linux and can be used to test for all major desktop and mobile browsers. You can use it directly on your local machine and in your local network.

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CHAPTER 1

Installation

MultiBrowser is a native application which can be used on Windows, macOS and Linux. To start using the application you will need to download and install it.

1.1 System Requirements

Your system should meet the following criteria if you want to run MultiBrowser:

Operating Systems * Windows 7, 8, 8.1 or 10 (32 or 64bit) * Windows Server 2012 R2 or newer * macOs / OS X 10.9 or higher * Linux (most distros)

RAM You will need at least 4 GB to fully use the application. We recommend 8 GB or more for best performance.

Disk Space Depending on the number of browsers you want to use at least 10 GB of free disk space are needed. To use all browsers provided by MultiBrowser you need around 50 GB of free disk space.

Warning: For some browsers the application will spin up a Virtual Machine (like Internet Explorer on macOS) so make sure to activate virtualization support if you want to run MultiBrowser inside a VM.

1.2 Download MultiBrowser

You can download the appropriate setup for your operating system in the Downloads section.

1.3 Installation

The installation depends on your platform:

Windows

You can just execute the downloaded MultiBrowser.exe which will launch a standard windows setup.

macOS / OS X

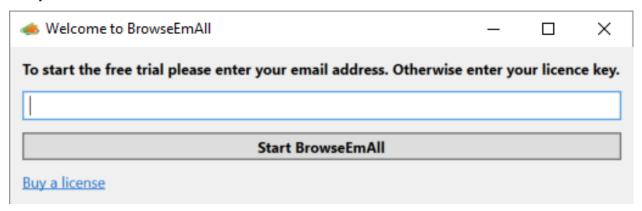
Mount the downloaded .dmg file and copy MultiBrowser.Mac to your /Applications folder.

Linux

Install the downloaded setup file. The details depend on your distribution and configuration.

1.4 Activate Licence or Trial

On the first run of the application you will be asked for your licence key. If you don't already have one you can just enter your email address to start the free trial.



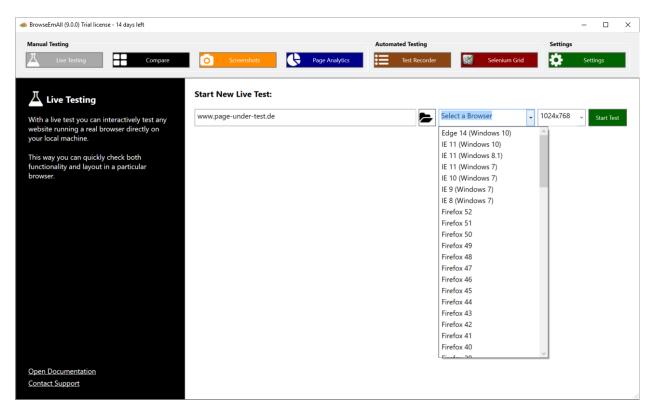
CHAPTER 2

Manual Testing

MultiBrowser gives you all the necessary tools to run manual tests against all major desktop and mobile browsers. For this 4 different functions are available:

2.1 Live Testing

Live testing is useful to quickly test or debug with a specific browser version. For this MultiBrowser will launch the browser you selected directly on your local machine.

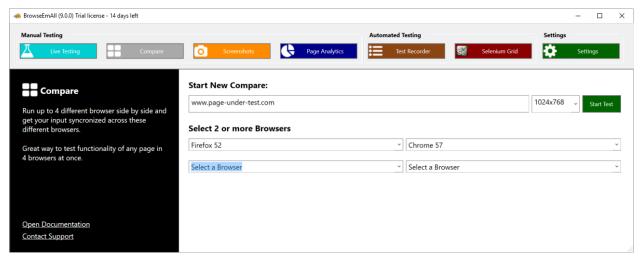


To start a new live test select **Live Testing** in the top navigation, enter the URL to test and select the browser version. After a click to **Start Test** the browser will be downloaded (if necessary) and launched on your machine.

You now have the unmodified release version of the the browser running on your local machine. This browser can be used for testing / development and includes the normal browser developer tools.

2.2 Browser Compare

For running through a regression testing script MultiBrowser provides you with the browser compare feature. With browser compare you can start up to 4 different browsers side-by-side and have your input synchronized across all different browsers. This can cut down your testing time significantly.

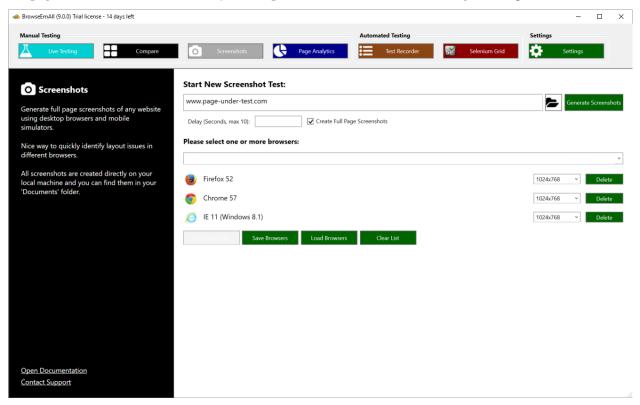


To start a new compare test select **Compare** in the top navigaton, enter the URL to test and select up to 4 different browsers. After a click to **Start Test** all selected browser will be downloaded (if necessary) and launched.

For the best testing experience wait until all browser have finished loading to start your test. Your input (scrolling, keyboard input, clicking) will be synchronized across all open browsers.

2.3 Visual Testing

To find issues with the layout of a specific page you can run a visual tests. During this test MultiBrowser will create a **full page screenshot** and **automated layout comparison** in all selected browsers for you to inspect.



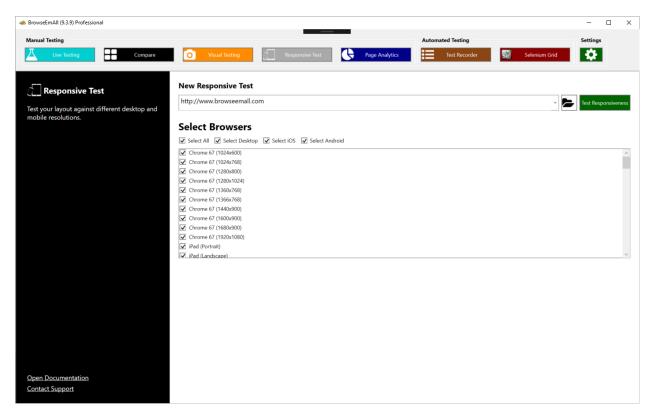
To start a new visual test select **Visual Testing** from the top navigation, enter the URL to test and select as many browsers as necessary. After a click to **Start Test** screenshots and layout comparisons for all selected browsers are created.

Note: After a visual test you can find all screenshots as image files in the subfolder *MultiBrowser* of your *Documents* folder.

2.4 Responsive Testing

To find issues with the layout in different desktop and mobile resolutions you can run a responsive tests. During this test MultiBrowser will create **full page screenshots** in all selected resolutions for you to inspect.

2.3. Visual Testing 7

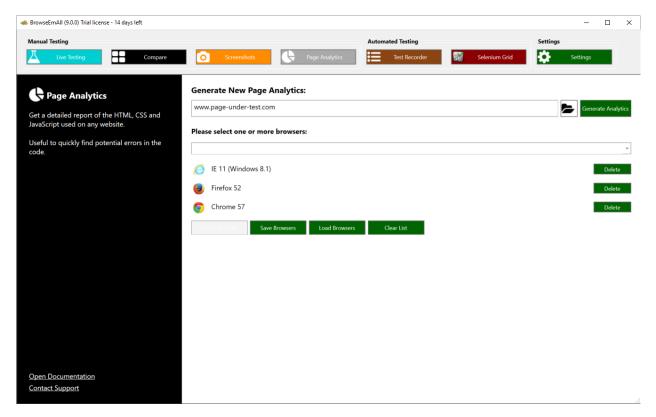


To start a new responsive test select **Responsive Testing** from the top navigation, enter the URL to test and select as many options as necessary. After a click to **Start Test** screenshots for all selected options are created.

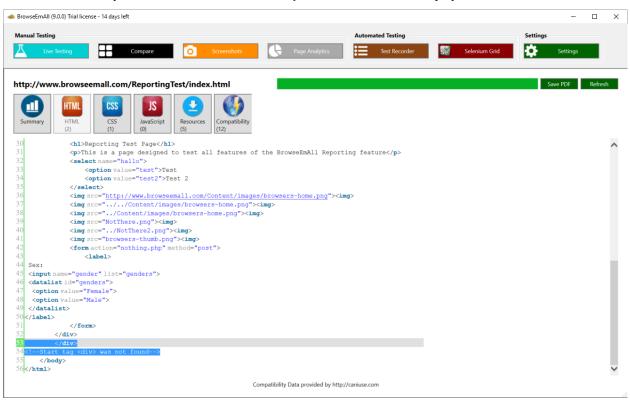
Note: After a responsive test you can find all screenshots as image files in the subfolder *MultiBrowser* of your *Documents* folder.

2.5 Page Analytics

This feature can help find errors and possible compatibility problems directly in the source code of a web page. For this MultiBrowser will analyse the HTML, CSS and JavaScript of a specific page and alert for any syntax errors, missing files and compatibility issues.



To start a new analytics test select **Page Analytics** from the top navigation, enter the URL to test and select as many browsers as necessary. After a click to **Generate Analytics** the results will be displayed like this:



2.5. Page Analytics 9

CHAPTER 3

Automation

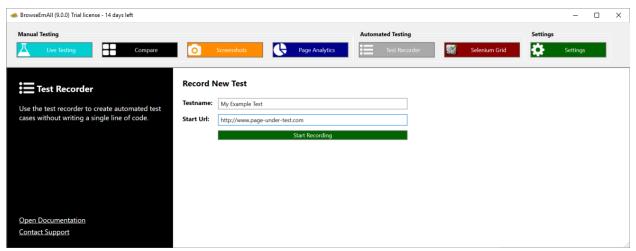
You can use MultiBrowser to automate your ongoing testing effort so less time is spent on manual testing. For this there are different features available:

3.1 Recording Tests

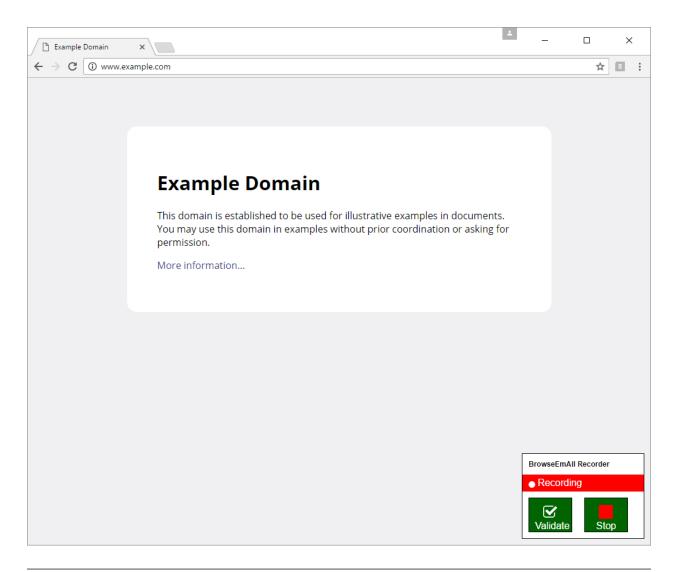
MultiBrowser gives you the possibility to record test cases directly in a browser and store them for later execution. This way you only have to record a test once and can run it in any browser supported by MultiBrowser.

Start a recording session

To record a new test case select **Test Recorder** in the top navigation and click on **Record New Test**. Enter a name for the test case and the URL you want to test.



After a click on **Start Recording** a new instance of Chrome will launch. All user interaction inside this instance will be recorded for the test case.



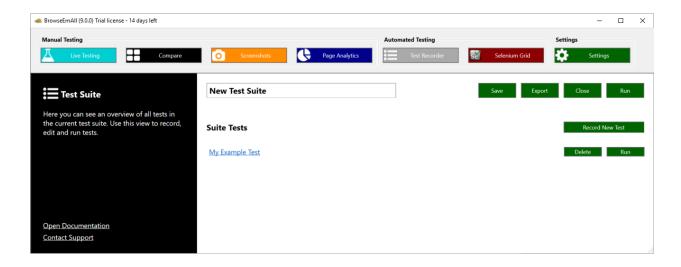
Note: Only actions on the web page will be recorded not any actions you take in the browser UI (like the back button for example).

Validating page state

Almost any test case will need some form of validation to make sure the page under test works correctly. For this you can add a validation using the recorder. To do so take a look at the bottom right of the launched Chrome instance. Here you can click the **Validate** button to start recording a validation. Now click any element or select any text you want to verify in your test case. This can be almost any element inside the web page.

End a recording session

After you have recorded all the necessary steps and validations for your test case you can use the **Stop** or **Stop Recording** buttons to end the recording session. The Chrome instance will be closed and after a few seconds your new test case will be displayed on screen.

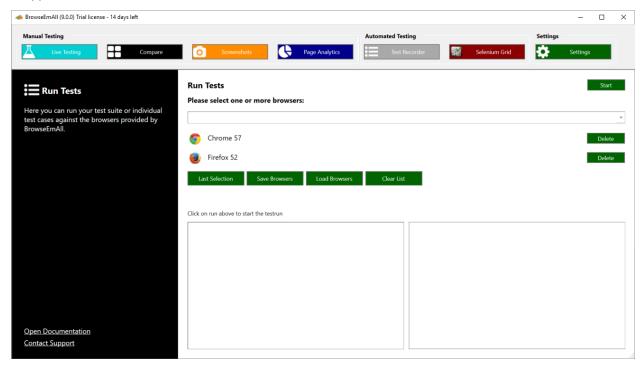


Note: Make sure to click on the **Save** button to save your test suite.

3.2 Running Tests

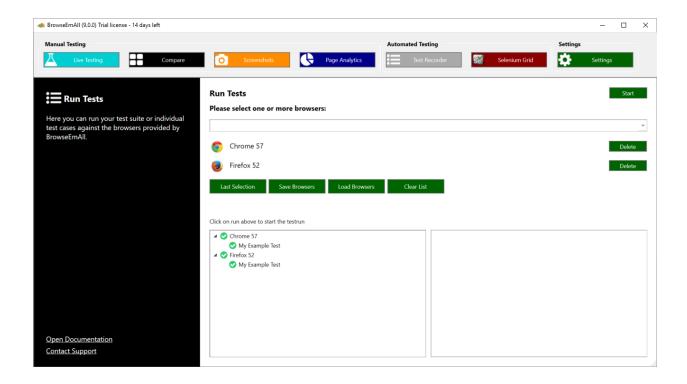
You are able to run your recorded test cases against any browser provided by MultiBrowser. This can be repeated any time you need to run your tests.

To run a single test case or a test suite select **Test Recorder** in the top navigation and open your existing test suite file. After a click to **Run** either for the hole suite or a single test case you will be able to select the browsers you want the test(s) to run in.



Select all browsers you need and click **Start** to begin the test run. Depending on the number of browsers and test cases this can take a while. The application will report back to you once the test run has been completed.

3.2. Running Tests



Warning: For a reliable test execution you should not use your machine while test cases are running.

3.3 Exporting Tests

If you want to execute your recorded test cases outside of MultiBrowser you can export them to one of the supported programming languages:

- C#
- Java
- Ruby
- Python

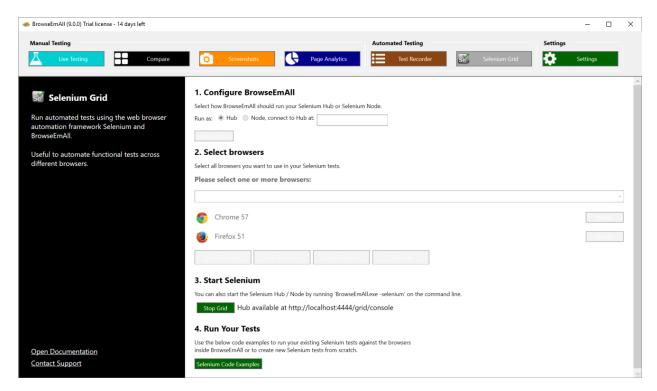
To run an export select **Test Recorder** in the top navigation and open your existing test suite file. Now click on **Export**, select the programming language of your choice and a destination file name.

3.4 Selenium Integration

You can run your existing Selenium test cases against all the browsers provided by MultiBrowser. This way you can skip all the necessary configuration work you need to do to make Selenium work. For this MultiBrowser has an integrated Selenium Grid which you can start really easy.

To start a new Selenium Grid select **Selenium Grid** in the top navigation. Select if you want to run as a Hub (everything is running on the local machine) or a Node (this machine will join a hub running on another machine).

In the second step select all browser you want to test against. After a click to **Start Grid** the Selenium Grid will be started. Depending on your browser selection this can take a few minutes as virtual machines are created.

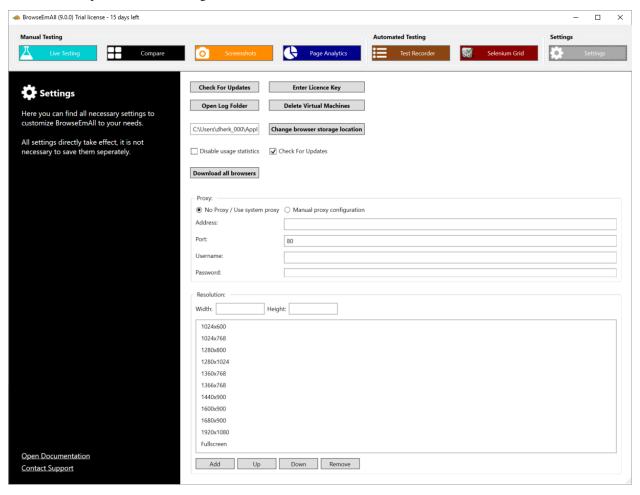


Now you can run your existing Selenium tests against the provided Selenium Grid. Click on **Selenium Code Examples** inside the application to see a few examples in different programming languages.

CHAPTER 4

Settings

MultiBrowser gives you the option to change a few different settings inside the applications settings menu. The options available are explained after the image.



4.1 Check For Updates

With this button you can manually check if a new version of MultiBrowser is available. Generally the application will always check for a new version on launch.

4.2 Enter Licence Key

Can be used to change or update your licence key.

4.3 Open Log Folder

Will open the folder that contains the MultiBrowser logfiles. This is useful to provide our support team with the logfiles in case of a problem.

4.4 Delete Virtual Machines

Deletes all virtual machines created by MultiBrowser.

4.5 Change Browser Storage Location

Defines the location on the hard disk where virtual machines and browser executables are stored. Change this if these files should not be part of your user profile.

4.6 Disable Usage Statistics

Disables to collection of anonymous usage statistics which can help us improve the application.

4.7 Download All Browsers

If you want to use MultiBrowser in an offline environment you can download all browsers at once.

Note: Depending on your network speed this can take a few hours. Around 50 GB of free disk space will be used.

4.8 Proxy

Useful to manually config a http and https proxy if the correct on is not picked up automatically.

4.9 Resolutions

Can be used to add custom resolutions for quick responsive testing.

4.9. Resolutions

20 Chapter 4. Settings

Command Line Interface

You can run MultiBrowser from the command line to automate tasks and build server integration.:

Windows / Linux:

MultiBrowser [Action] [Options]

MacOS:

open MultiBrowser.Mac.app -args [Action] [Options]

5.1 Actions

MultiBrowser knows 4 different actions:

-start

Launches MultiBrowser and automatically switches to the specified browser and url. You can choose not to specify browser and/or url. MultiBrowser will then use the standard-settings.

-screenshot

Launches MultiBrowser and automatically creates one or more screenshots depending on the options. After the screenshots have been created MultiBrowser will close automatically.

-responsive

Launches MultiBrowser and automatically creates screenshots for responsive layout verification in all desktop and mobile resolutions. After the screenshots have been created MultiBrowser will close automatically.

-report

Launches MultiBrowser and automatically creates a cross browser report. After the report has been created Multi-Browser will close automatically.

-suite

Opens an existing test suite.

-runtests

Opens an existing test suite and runs all tests using the browsers specified on the MultiBrowser line or in the suite.

5.2 Options

Different options can be applied to these actions. These options are:

Specify the URL for an action

This option can be used to specify the url for any given action. Applies to: -start, -screenshot, -responsive, -report:

-url:[URL]

Example::

-url:http://www.example.com

Specify a single browser for an action

This option can be used to specify a single browser for a given action. Applies to: -start, -screenshot, -report:

-browser:[BROWSER]

Example::

-browser:CHROME41

Specify more than one browser for an action

This option can be used to specify more than one browser for a given action. Applies to: -screenshot, -report, -runtests:

-browsers:[BROWSER1],[BROWSER2]

Example::

-browsers: CHROME41, FIREFOX37

Specify the resolution for an action

This option can be used to specify the resolution for a given action. The resolution can not be bigger than your native resolution. Applies to: -start, -screenshot:

-resolution:[RESOLUTION]

Example:

-resolution:1024x768

Crop Screenshots

This option can be used to tell MultiBrowser to crop the screenshot to the current or given resolution. Omitting this parameter will take a full page screenshot. Applies to: -screenshot:

-snip

Example::

-snip

Delay Screenshots

This option can be used to tell MultiBrowser to delay taking of the screenshot for a number of given seconds. Omitting this parameter will take a screenshot without delay. Applies to: -screenshot:

-delay:[NumberOfSeconds]

Example::

-delay:5

Screenshots Comparison Tolerance

This option can be used to tell MultiBrowser the tolerance used for layout comparison between screenshots in pixel. Applies to: -screenshot:

-tolerance:[NumberOfPixels]

Example::

-tolerance:10

Specify the data location

This option can be used to tell MultiBrowser in which location the result of an action should be saved. Applies to: -screenshot, -responsive, -runtests:

-saveto:[PATH]

Example::

-saveto:C:\Path\To\Folder\

Specify a specific file location

This option can be used to tell MultiBrowser to which file the result of an action should be saved. Applies to: -report:

-savetofile: [PATH]

Example::

-savetofile:C:\Path\To\File.png

Record Video

This option can be used to tell MultiBrowser to record a video during automated test execution. Applies to: -runtests:

-record

Example::

-record

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5.3 Examples (Windows / Linux)

Starting MultiBrowser:

MultiBrowser -start -url:http://www.google.de -browser:IE9

Generate screenshots:

MultiBrowser -screenshot -url:google.com -saveto:C:\Path -resolution:1280x1024
→browsers:IE8,IE9 -tolerance:10

Generate report:

MultiBrowser -report -url:google.com -saveto:C:\Path -browsers:IE11,IE10

Open a test suite:

MultiBrowser -suite:C:\Users\TestSuite.bts

Running a test suite:

MultiBrowser -runtests:C:\Users\TestSuite.bts -browsers:CHROME62,FIREFOX57,IE10

5.4 Examples (MacOS)

Starting MultiBrowser:

open MultiBrowser.Mac.app --args -start -url:http://www.google.de -browser:IE9

Generate screenshots:

open MultiBrowser.Mac.app --args -screenshot -url:google.com -saveto:/Path/to/save →resolution:1280x1024 -browsers:IE8,IE9 -tolerance:10

Generate report:

open MultiBrowser.Mac.app --args -report -url:google.com -saveto:/Path/to/save →browsers:IE11,IE10

Open a test suite:

open MultiBrowser.Mac.app --args -suite:/Path/to/Suite/TestSuite.bts

Running a test suite:

open MultiBrowser.Mac.app --args -runtests:/Path/to/Suite/TestSuite.bts

Running a test suite:

open MultiBrowser.Mac.app --args -runtests:/Path/to/Suite/TestSuite.bts →browsers:CHROME62,FIREFOX57,IE10