

# Whats New

Release date - Dec-30, 2021

## Main Highlights

### More realistic load testing with real browsers.

1. Now you can import a Selenium script used for functional testing and run a load test with real physical browsers.
2. Divide any Selenium script into transactions with no manual scripting and receive per transaction performance metrics on load test reports.
3. This StresStimulus version made headway with supporting Selenium script in C#, and support for Java and Python is scheduled for release in the next version, 5.6

### StresStimulus is now an automation tool.

1. Create action components implementing any programmatic behavior. 
2. Combine the action components into the customizable workflow using available StresStimulus workflow elements such as **Loops, If...Then and... While**.
3. Execute the workflow with action components in a single thread or multiple threads for higher execution intensity.
4. Combine execution of workflows with action components with any load test.
5. Receive detailed performance reporting on how action components work.

### Reengineered test profiles for more robust multi-test management and automation

1. Test profile now stores host remapping configurations that simplify executing a test against multiple environments.
2. Test profile now stores the list of load agents and the VU distributions between the load agents and test cases for more flexibility with test execution.
3. Test profile now stores the browser and network mix for more testing options.
4. A test can have multiple test profiles that simplify exhausting testing of multiple conditions. Before, tests had only one test profile.
5. Test profiles from one test can be copied to other tests to save time on configuration.
6. The command line for launching StresStimulus now supports the test profile argument for automating testing.

## Other new features and enhancements

### Enhanced test scenario capturing

1. **Complete recording diagnostic.** Now the recorder can determine if it failed to configure the system proxy automatically due to insufficient permissions and informs a user regarding resolution steps.
2. **Intelligent recording.** StresStimulus now determines request dependencies during recording more accurately to ensure proper request concurrency on playback.

### The more versatile test designer

1. **Speed up scripting with drag-and-drop items.** Now you can drag and drop test case items, such as extractors and parameters, from one test case to another to save time on scripting. 
2. **Rapid code development using multiple editor Windows.** Previously only one code editor window was available. Now you can open any number of code editor windows for editing several script snippets simultaneously. 
3. **Option to disable any object.** Previously to remove an object from the test case tree, such as transaction, or delay you needed to delete it. Now you have an option to disable it. It is more convenient because you can re-enable the object if you need to revert this action. 
4. **Enhanced object cloning.** Destination picker now allows selecting the clone destination as **before**, **after**, or **into** the selected node in any test case. 
5. **More intuitive coding using tab-based editor Windows.** Previously code editor window was implemented as a pop-up that must be closed while checking other UI areas. Now code editor windows are displayed on tabs and can stay open while navigating to other UI areas.

### High productivity scripting

1. **More robust parameterization of file upload scenarios.** Previously, you could parameterize the uploaded file name. Now you can also parameterize file content-type. 
2. **Empty transactions.** Previously you needed to define a transaction when you created it. You can now create an empty transaction and define its details later for convenience.  

3. **More realistic testing with random delays.** Previously, delay objects could only have a static duration. Now you can specify a random delay duration with a range. 🔄
1. **Increased think time granularity.** Now you can specify the think time for pages and transactions with up to millisecond accuracy. Previous versions supported only seconds. 🔄
2. **JPATH extractors with wildcards.** Now you can use wildcards to create multiple JPATH extractors faster 🔄
3. **Faster autocorrelation.** Option to exclude large static requests from being scanned to speed up autocorrelation.

## Test configuration

1. **More load pattern options.** A new option allows **configuring VU** ramp-down after the ramp-up in the step load pattern.
2. **Save time on configuring cloud tests.** Now you can create multiple AWS and Azure cloud templates by cloning them to multiple copies in one sweep. Previously, multiple wizard runs were required for the same.
3. **Simplified host remapping by adding support for wildcards.** Now you can remap any number of subdomain hosts on the same domain with a single line with a wildcard.
4. When creating a TC Group, you can add multiple TCs at once. Previously TC could only be added one by one. 🔄
5. **More options to use test data.** Previously, after consuming all dataset records, the only option was "round-robin" to reuse data. Now StresStimulus can also use only the last record or abort the VU. 🔄

## Upgraded performance analyzer

1. **New grid with Transaction Activity metrics.** It displays performance metrics for every transaction for every VU and iteration. Previously, this data was only available as a .csv file export. 🔄
2. **New grid with Test Case Activity metrics.** It displays performance metrics for every VU and iteration. 🔄 🔄
3. **New Error Summary section.** It displays the number of test errors by type in the Test Result Summary view.
4. **Performance graphs clarity.** Previously, the transaction and test case graphs had vertical axes marked in percent of the time range. Now they are marked in seconds for better clarity 🔄
5. **Optimized presentation of the performance graphs.** The performance graphs auto-rescales now to present all response time data points collected in real-time 🔄
6. **More test output options for better data management.** An additional option saves extractors generated in multiple test runs to a consolidated file. Previously saving to separate files was the only option.
7. **Consolidated data down for custom reports.** You can create a consolidated export file containing performance metrics for all transactions, pages, and test cases with a single click. Previously, only separate export files were available, and manual consolidation was required.
8. **Simplified performance monitoring configuration.** Now you can add to the test multiple perfmon counters at once. 🔄
9. In cases when the recorded host was retargeted, transaction and page performance subreports reflect the tested URL, not the recorded URL, as in previous versions. 🔄 🔄

## Automation & CI/CD integration

1. **Better teamwork support.** Create a local mailing list in any test, and StresStimulus will send automated emails with test results to the local lists and global lists that existed before. 🔄
2. **Enhanced automatic emailing.** The subject of the automated email with test results now includes test name to simplify management of the multiple scheduled tests 🔄
3. **Discrete automatic emailing.** Now you can enable the Automated email with test results only on test failures. 🔄
4. **Higher transparency in the management of multiple scheduled tests.** Attached to the automatic email report file name now has the name of the executed test. Previously its always was Result.zip 🔄 🔄
5. **More automated testing capabilities.** The command-line interface now accepts the test profile argument to specify more concrete options for automated testing. 🔄

## Miscellaneous

1. **Support for TLS 1.3.** If your application under test no longer supports TLS 1.2, StresStimulus will automatically switch to TLS 1.3.
2. **Enhanced StresStimulus installer.** Now installer can automatically download and install Fiddler without throwing errors.
3. **Upgraded support utilities.** The Inspect My Test feature now validates your test before you can upload it to the StresStimulus secure support repository for troubleshooting by StresStimulus support. In addition, it will prompt you to complete Verify it is missing.
4. Multiple fixes and improvements.