StresStimulus v4.6

User Interface Reference

TABLE OF CONTENTS

Search the User Interface Reference section

User interface (UI) reference explains the options that appear in StresStimulus windows, dialog boxes and other UI elements. Much of this material is available in the UI. The purpose of this document is to combine this information into a searchable document.

Because all topics are hierarchically organized, access to configuration settings, or functions can be quickly located, not just by content, but also by context. For example, search results for the term "think time" point to the page with the following path:

Workflow Tree and Functional Area -> Build Test Case

While the topic, Build Test Case, does not explain how to navigate to its functionality, its contexts suggest that user has to click to on the Build Test Case node of the Workflow Tree to configure page think time.

This section includes the help content embedded into StresStimulus and easy accessible as contextual help.

StresStimulus help content includes the following information:

- **Treeviews, toolbars, menus.** Every node of a TreeView, a Toolbar button or an item of a menu is presented by its icon, description and a tooltip, if exist.

- **Help boxes:** Virtually every window, dialog box and toolbar has one or several embedded help boxes, each of which pop-up when mouse-over or click a corresponding light-bulb icon.

- **Property grids.** The name of properties and their description is provided for every object displayed in a property grid.

- **Data grids:** Column names and their tooltips are provided for every grid.

1   WORKFLOW TREE AND OBJECTS

This chapter describes every node on the Workflow Tree and corresponding Functional Area.

The Navigation tree topics in the documentation hierarchically correspond to the Workflow Tree in the application, so that all topics found here can easily be located. For example, if you search for "Data Generators" in the documentation, just follow the Navigation tree structure in order to find Data Generators section in the application.
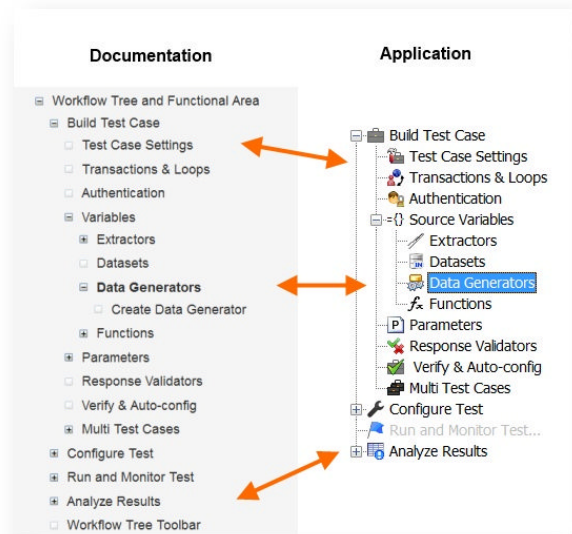
Workflow Tree includes four top-level   nodes each   of which match a related testing step:

Button	Name	Action
🔴	Record Test Case	Create a Test Case by navigating your application OR open an existing Test Case
💼	Build Test Case	Create and configure Test Case
🔧	Configure Test	Configure Test and load level
🚩	Run and Monitor Test	Start a load test and monitor performance …
🗄	Analyze Results	Open test run results and analyze performance metrics

1.1   Record Test Case

Toolbar

Icon	Action	Description
	Status: Recording	
	Status: Paused	Click to Pause recording.
	Resume	Click to Resume recording.
	Stop	Close the browser and set the test case in StresStimulus.
	Cache	Clear browser cache and cookies.

Help Boxes

| Recorder	To record a test case: 1. Go to the tested website to start recording. 2. To skip recording of some pages, click "Pause". 3. Complete navigating web pages. 4. Click "Stop" to close the web browser. A new test case will be created. Notes: To configure clearing browser cache, click "Cache" (IE only) See Also: Recording with Web Browser Recording from Other Sources
Transactions	To create a transaction, enter its name and complete navigating through transaction steps. Entering a new transaction name will designate the beginning of the subsequent transaction. See Also: Creating Transactions

1.1.1   Browser Cache

Help Boxes

Clear Browser Cache Options	Recorder automatically clears resources from the targeted domains on the list. - Click View/Edit to access the Clear Cache Domain List - Check the "Clear" box to enable automatic cache clearing before recording. - Check the "After recording" box to automatically add new targeted domain to the list - Select what resources you want to clear. See Also: Automatic browser cache clearing
Clear Cache Domain List	Clear Cache Domain List includes domains, which resources will be cleared from the browser cache before recording test cases. It is recommended to clear browser cache before recording a test case. Clear Cache Domain List is used for automatic cache clearing. You can edit this list. See Also: Automatic browser cache clearing

1.2   Build Test Case

The **Build Test Case** section includes the following nodes:

1-st Level	2-nd Level	Name	Description
🔒		Authentication	Set VU credentials
={}		Source Variables	Define Variables that can be use for Parameterization
	🖊	Extractors	Define rules of extracting values from responses

1-st Level	2-nd Level	Name	Description
		Datasets	Add or Edit Dataset
		Data Generators	Add or Edit Data Generator
	f_x	Functions	Add or Edit Function Instances
P		Parameters	Use Source Variables to parameterize Requests
		Response Validators	Add or edit custom rules to validate responses
✔		Verify & Auto Config	Verify Test Case, find and configure missing parameters
		Managing Test Case(s)	Configure single and multiple test cases

1.2.1   Test Case Tree

1.2.1.1   Test Case

Test Case Properties

Property	Description
Object type	This object type is currently selected in the Test Case tree. Its properties are displayed in this grid
Name	The Test Case name
Description	The Test Case description
Recorded On	The date and time when the test case was recorded
URLs	The number of requests in the Test Case
Request Size	The size of all requests in the Test Case

Property	Description
(KB)	
Response Size (KB)	The size of all responses in the Test Case
Duration (s)	The total of the response times of all pages
Request Timeout	Select "Enabled" to impose Timeouts specified in each request. Select "Disabled" to ignore the Timeouts. Use Disabled for determining response times of slow requests. Note: this may cause long or indefinite wait times during the test run.
Ignore Schema Change?	Select Yes if you do not wish to change HTTP to HTTPS protocol and vice versa for this Test Case, even if Schema Change is setup for other Test Cases
Think Times between pages	Specify think time to inject after every page. Select "Page-level" to use values specified in the pages (default is the recorded think time). Select "Constant" to use a constant value. Select "Random" to randomize think time. Tip: for stress tests, select "Zero".
Think Time (s)	A constant think time between pages.
Min Think Time (s)	Minimum think time
Max Think Time (s)	Maximum think time
Delay after the test case	Tips: For stress tests, select "Zero". To issue iterations with a certain frequency, select Pacing.
Constant delay (s)	A constant delay added after the test case replay
Minimum duration of the test case replay (s)	Enter the minimum test case replay duration. If the test case replays faster, the appropriate delay will be added.
Cache Control	Select "Enabled" to emulate browser caching and session management. Select "Disabled" to emulate browsers with disabled caching (all requests will be sent) and restarting browsers before starting a new iteration (browser sessions will not persist across test iterations).
New VU %	Percentage of the New vs. Returning VUs. Note: (a).On the 1-st iteration, new VUs will have an empty cache, just as a first time user. All requests will be sent. (b).On the 1-st iteration, returned VUs will have a primed cache. Caching

Property	Description
	rules for each request will be determined based on server caching headers. (c). On the subsequent iterations, all VUs are treated as returned VUs.
VU restarting browsers %	Percentage of VUs restarting browsers before starting new iteration. For these users, browser sessions will not persist across the test iterations.
Request Timeout	Select "Enabled" to impose Timeouts specified in each request. Select "Disabled" to ignore the Timeouts. Use Disabled for determining response times of slow requests. Note: this may cause long or indefinite wait times during the test run.
Ignore Schema Change?	Select Yes if you do not wish to change HTTP to HTTPS protocol and vice versa for this Test Case, even if Schema Change is setup for other Test Cases.

1.2.1.2   Page

Page Context Menu

Icon	Command	Description
	Edit Page	Edit the selected object
	Clone Page	Clone the selected object
	Delete object(s)	Delete the selected object(s) with children
	Remove container	Remove the selected container, keep children objects
	Create Transaction	Create a Transaction starting from the selected request
	Create Loop	Create a Loop starting from the selected request or transaction
	Create If...Then	Create If...Then starting from the selected object
	Create Do...While	Create Do...While starting from the selected object
	Insert Delay	Insert a Delay after the selected object
	Insert Rendezvous	Insert a Rendezvous after the selected object
	Insert Skip-To-Next-Iteration	Insert a Skip to Next Iteration after the selected object

⬆	Move Up	Move the selected object one position up
⬇	Move Down	Move the selected object one position down
📊	Show Properties	Show Property Grid on the bottom
📊	Hide Properties	Hide Property Grid on the bottom

Page Properties

Host	The host
Path	The path
Query	The query string
Title	The page title
URLs	The number of requests in this container
Request Size (KB)	The size of all requests in this container
Response Size (KB)	The size of all responses in this container
Duration (s)	The time that elapsed between the first request and the latest response in this container
Goal (s)	The page expected maximum time for all its responses to come back. Iterations where the page response times exceeded the goal are marked as "missed goal". To remove the goal, leave it blank.
Think Time (s)	The think time is a delay added at the end of the page to simulate the user's wait time before requesting the subsequent page
When to Request the Page	Select "On 1-st iteration" to skip this page or transaction (e.g. login) on the subsequent iterations. Select "On last iteration" to request this page or transaction (e.g. logout) on the last iteration only, if the test is set to run a specified number of iterations.

1.2.1.3 Request

Request Context Menu

Icon	Command	Description
	Show Session Inspector	Open Session Inspector in a new tab
	Edit Session	Edit the selected session
	Clone Session	Clone the selected object
	Delete Session	Delete the selected object(s)
	Create Transaction	Create a transaction starting from the selected object
	Create Loop	Create a loop starting from the selected object
	Create Page	Create a page starting from the selected object
	Create If...Then	Create If...Then starting from the selected object
	Create Do...While	Create Do...While starting from the selected object
	Insert Delay	Insert a Delay after the selected object
	Insert Rendezvous	Insert a Rendezvous after the selected object
	Insert Skip-To-Next-Iteration	Insert a Skip to Next Iteration after the selected object
	Create Extractor	Create an Extractor from the selected session response
	Create Parameter	Create a Parameter in the selected session request
	Create Validator	Create a Validator of the selected session response
	Show Properties	Show property grid on the bottom
	Hide Properties	Hide property grid on the bottom

Request Properties

Property	Description
Host	The host
Path	The path
Query	The query string

Property	Description
Timeout (s)	The maximum amount of time for receiving the request. A timeout error is triggered if the session's response time exceeds the Timeout.
Caching Rules	Select "Not Cached" to always request the session disregarding recorded caching headers. Select "Cached" to never request the session for returning VUs with enabled caching. Select "Normal" to use the recorded caching headers.

1.2.1.4   Transaction

Transaction Context Menu

Icon	Command	Description
	Edit Transaction	Edit the selected object
	Clone Transaction	Clone the selected object
	Delete object(s)	Delete the selected object(s) with children
	Remove container	Remove the selected container, keep children objects
	Create Transaction	Create a Transaction starting from the selected request
	Create Loop	Create a Loop starting from the selected request or transaction
	Create Page	Create a page starting from the selected object
	Create If...Then	Create If...Then starting from the selected object
	Create Do...While	Create Do...While starting from the selected object
	Insert Delay	Insert a Delay after the selected object
	Insert Rendezvous	Insert a Rendezvous after the selected object
	Insert Skip-To-Next-Iteration	Insert a Skip to Next Iteration after the selected object
	Move Up	Move the selected object one position up
	Move Down	Move the selected object one position down
	Show Properties	Show Property Grid on the bottom

	Hide Properties	Hide Property Grid on the bottom

Transaction Properties

Property	Description
Name	The Transaction name
Description	The Transaction description
Goal (s)	The transaction's completion time limit. To remove the goal, leave it blank.
Think Time (s)	The think time is a delay added at the end of the transaction to simulate the user's wait time before requesting the subsequent page

1.2.1.5 Loop

Context Menu

Icon	Command	Description
	Edit Loop	Edit the selected object
	Clone Loop	Clone the selected object
	Delete object(s)	Delete the selected object(s) with children
	Remove container	Remove the selected container, keep children objects
	Create Transaction	Create a Transaction starting from the selected request
	Create Loop	Create a Loop starting from the selected request or transaction
	Create Page	Create a page starting from the selected object
	Create If...Then	Create If...Then starting from the selected object
	Create Do...While	Create Do...While starting from the selected object
	Insert Delay	Insert a Delay
	Insert Rendezvous	Insert a Rendezvous

	Insert Skip-To-Next-Iteration	Insert a Skip to Next Iteration
	Insert Set-Cookie	Insert a Set-Cookie
	Move Up	Move the selected object one position up
	Move Down	Move the selected object one position down
	Show Properties	Show Property Grid on the bottom
	Hide Properties	Hide Property Grid on the bottom

Loop Properties

Property	Description
Name	The Loop name
Description	The Loop description
When to run the Loop	Select "Always" to always run the loop. Select "Check a condition first" to compare if an extractor matches a string to decide if the loop should run.
An Extractor name	Select from the drop-down an Extractor to compare with the string
A string to match	Specify a string to compare with the Extractor
Run the Loop if Match?	Select Yes to run the Loop when the Extractor matches the String, and skip the Loop when the Extractor does not match the String. Select No to skip the Loop when the Extractor matches the String, and run the Loop when the Extractor does not match the String.
Loop Type	Select Unconditional for a loop repeated specified number of times. Select Conditional for a loop with an exit condition.
Number of Repeats (Max.)	For an Unconditional Loop, set a number of repeats. For a Conditional Loop, set a maximum number of repeats, which cannot be exceeded. To remove the cap, set "-1".
Delay before next Loop (s)	The delay before starting the next loop cycle (s)
Condition	A type of the condition that is checked at the end of the conditional loop to

Type	determine whether the loop should continue or exit. If the condition is based on finding in an HTTP response a specified text or regular expressions, select "Text Based". If the condition is based on evaluating an extractor, select "Extractor Based".
Response to Search	Select a response number from the drop-down, where the specified text or regular expressions will be searched.
Search String	Specify a character string that will be searched in the HTTP response.
Search String Type	If the search string is a text, select "Text". If the search string is regular expressions, select "Regular Expression"
Exit Loop if Found?	Select Yes to repeat the loop, when "Search String" is not found, and exit the loop, when "Search String" is found. Select No to repeat the loop, when "Search String" is found and exit the loop when "Search String" is not found.
Extractor Name	Select from the drop-down an Extractor that will be used in the "Extractor Based" condition.
Text to compare	Specify a text to compare with the Extractor value in the "Extractor Based" condition.
Exit Loop if Match?	Select Yes to repeat the loop, when "Text to Compare" does not match the Extractor, and exit the loop, when "Text to Compare" matches the Extractor. Select No to repeat the loop, when "Text to Compare" matches the Extractor, and exit the loop, when "Text to Compare" does not match the Extractor.

1.2.1.6   If...Then

If...Then object has the same context menu as Loop.

If...Then Properties

Property	Description
Description	The If-Then block description.
Extractor to match	Select an extractor from the drop-down to compare the given text to.
Text to match	Specify a string to compare with the given extractor's value.
Run the child objects if Match?	Select Yes to execute the child objects when the extractor matches the given value. Otherwise, the child objects will run when the extractor does not match the given value.

1.2.1.7   Do...While

Do...While object has the same context menu as Loop.

<u>Do...While Properties</u>

Property	Description
Description	The Do-While block description.
Number of Repeats (Max.)	The maximum number of repeats, which cannot be exceeded.
Delay before next Loop (s)	The delay before starting the next loop cycle in seconds.
Condition Type	A type of the condition that is checked at the end of the conditional loop to determine whether the loop should continue or exit. If the condition is based on finding a specified text or regular expressions in an HTTP response, select "Text Based". If the condition is based on evaluating an extractor, select "Extractor Based".
Text Based	Extractor Based
Response to Search	Select a response number from the drop-down, where the specified text or regular expressions will be searched.
Search Text	Specify a character string that will be searched in the HTTP response.
Search Text Type	Select "Text" if the search string is text. If the search string is a regular expression, select "Regular Expression".
Extractor to match	Select an extractor from the drop-down to compare the given text to.
Text to match	Specify a string to compare with the given extractor's value.
Exit While Loop if Match?	Select Yes to exit the while loop execution when the given text is found in the "Text Based" condition or when the given extractor's value matches the given text in the "Extractor Based" condition. Otherwise, the while loop will exit when the given text is NOT found in the "Text Based" condition or when the given extractor's value does NOT match the given text in the "Extractor Based" condition.

1.2.1.8   Delay

<u>Delay Context Menu</u>

Icon	Command	Description
⬆	Move Up	Move the selected object one position up
⬇	Move Down	Move the selected object one position down
🗔	Show Properties	Show Property Grid on the bottom
🗔	Hide Properties	Hide Property Grid on the bottom

Delay Properties

Property	Description
Delay (s)	A wait time in seconds after the next action is issued
Description	The Delay Description

1.2.1.9   Set Cookie

Set-Cookie Context Menu

Icon	Command	Description
⬆	Move Up	Move the selected object one position up
⬇	Move Down	Move the selected object one position down
🗔	Show Properties	Show Property Grid on the bottom
🗔	Hide Properties	Hide Property Grid on the bottom

Set-Cookie Properties

Property	Description
Name	The cookie name
Value	The expression that set's the cookie's value
Domain	The domain the cookies belongs to. Must not be blank.
Path	The path associated with the cookie. The default is "/"

1.2.1.10   Rendezvous

Rendezvous Context Menu

Icon	Command	Description
⬆	Move Up	Move the selected object one position up
⬇	Move Down	Move the selected object one position down
📊	Show Properties	Show Property Grid on the bottom
📊	Hide Properties	Hide Property Grid on the bottom

Rendezvous object has no properties.

1.2.1.11   Skip-to-Next-Iteration

Skip-to-Next-Iteration Context Menu

Icon	Command	Description
⬆	Move Up	Move the selected object one position up
⬇	Move Down	Move the selected object one position down
📊	Show Properties	Show Property Grid on the bottom
📊	Hide Properties	Hide Property Grid on the bottom

Skip-to-Next-Iteration object has no properties.

1.2.1.12   Toolbar

Toolbar

Icon	Description
🞣	Expand by one level
🗁	Collapse by one level
↩	Undo (Ctrl+Z)
↪	Redo (Ctrl+Y)
✏	Edit the selected object

✗		Delete the selected object
		Find Previous (Shift+F3)
		Find Next (F3)
		Find sessions by content (Ctrl+F)
		Clear Search
		Delete the found highlighted sessions
		Show autocorrelation parameter details
		Hide autocorrelation parameter details
		Show property grid on the bottom
		Hide property grid on the bottom
		Hosts
		Content-Types
		Dock on the right
		Dock on the left
		Collapse to the left

Help Boxes

Test Case Tree Search	- To find a value in the Test Case Tree, start typing in the Search Tree box.
	- To find the next/previous value, click "Find Next/Previous".
	- To find and highlight sessions by request/response content, click Find Sessions by Content or hit (Ctrl+F).
	- To clear all highlights, click "Clear Search".
	- To delete highlighted sessions, click "Delete highlighted".
	See Also:
	Searching Test Case Tree
Test Case Tree Command	- To show or hide autocorrelation details, click

	"Show" or "Hide" autocorrelation parameters.
	- To show or hide properties, click "Show" or "Hide" property grid.
	- To show hosts targeted in this Test Case, click "Test Case hosts".
	-To show content-types in this Test Case, click "Test Case content-types".
	- To dock the test case tree to Fiddler on the left or to StresStimulus on the right, click "Dock…"

Test Case Hosts

Toolbar

Button	Action
	Delete the requests to the selected hosts
	Add the selected hosts to the Excluded Hosts list
	Show the Excluded Hosts list

Help Boxes

Test Case Hosts	This list displays hosts targeted in this Test Case.
	Toolbars commands: - Delete requests to the selected hosts from the Test Case.
	- Add the selected hosts to the Excluded Hosts list. Requests to these hosts will be ignored in future recordings.
	- Show the Excluded Hosts list.
	See Also: Purging requests to unwanted hosts

1.2.1.13   Session Inspector

Toolbar

Button	Action

☑	Unlock for Editing
💾	Save session changes
▬	Split the window at 1/4
▬	Split the window at 1/2
▬	Split the window at 3/4
🧩	Create a Validator for a response selected in the Test Case Tree or the session grid
⬇	Highlight the Next Difference
☰	Show line numbers
☰	Hide line numbers
⊟	Split screen 1:1
ℹ	Session Info...

Help Boxes

Session Inspector	Session Inspector displays: - Request in the top text box - Response in the bottom text box To edit the session content, check "Unlock for Editing" box.
Compare Session Inspector	Select a tab to specify which part of the session to compare. - To show/hide line numbers, click "Show/Hide...". - To split the screen 1:1, click "Split...". See Also: Comparing Recorded and Replayed Sessions
Compare Inspector: Recorded Session	In the request, if you find a recorded value that must be correlated, select it and: 1. Click "Find the highlighted text in the previous responses". A list of responses where the extractor

	can be created will be highlighted. Create the extractor.
	2. Click "Parameterize the selected value".
	A parameterization dialog with pre-selected settings will open.
	See Also:
	Comparing Two Recorded Sessions
	Extractors
	Parameterization
Compare Inspector: Replayed Session	- To create a validator for a session, click "Create Validator".
	- To show the replayed session's information, click "Session Info...".
	See Also:
	Response Validators
Recorded Request Commands	- Click "Find selection in responses" to find
	responses containing the selected text where
	an extractor can be created.
	- Click "Replace selection with parameter"
	to create a parameter.
	See Also:
	Extractors
	Parameterization

1.2.2   Authentication

Toolbar

Button	Action
📁	Import a .csv file with user credentials

☐	Host-Specific Credentials

Help Boxes

Server Authentication	Use this grid when the tested website uses Basic, Windows Integrated (e.g. NTLM) or other Kerberos authentication.
	Enter users' credentials in the grid or click "Import" on the toolbar and select a .csv file with the user's credentials matching the grid columns.
	Multiple user credential rows are consumed by the VUs in a round-robin order.
	Note 1: For Form authentication, in the Datasets section, create an Authentication dataset and use it in the Parameterization section.
	Note 2: Check the Host-specific Credentials box to enter different credentials for multiple hosts.
	Note 3: Check the User Groups box to assign credentials to user groups. Then enter a user group name on each row. See Also: Authentication

Authentication Columns

Column	Description
Domain	Domain to authenticate a VU
Username	Username to authenticate a VU
Password	Password to authenticate a VU

Host	Host to which the credentials will be submitted

1.2.3   Variables

Help Boxes

Variables	Variables are evaluated and used during the replay:
	1. In Parameters, to replace request recorded values.
	2. In Actions, for custom processing (coming soon).
	Supported Variables types: Datasets, Extractors, Data Generators, and Functions
	See Also: Parameterizing dynamic tests

1.2.3.1   Extractors

Toolbar

Button	Action
✚	Expand All
🗀	Collapse All
🛠	Create an Extractor for a response selected in the Test Case Tree or the session grid
✎	Edit the selected Extractor
⊞	Show the selected Extractor in the Test Case Tree
⊞	Show the associated with the Extractor response in the session grid
Ac	Hide autocorrelation parameter details
Ac	Show autocorrelation parameter details
✕	Delete the selected Extractor(s)

Help Boxes

Extractors	An Extractor defines a rule of retrieving a value from a response. The value is assigned to a variable with the same name that can be used to parameterize subsequent requests. See Also: Extractors

Extractor Context Menu

Icon	Command	Description
	Edit	Edit the selected object
	Verify	
	Show on Tree	Show selected item on the Extractor Tree
	Show Sessions	
	Delete Extractor(s)	Delete the selected object(s)
	Disable Extractor(s)	

Extractor Properties

Property	Description
URL	The URL of the response that will be parsed to extract a value
Name	The Extractor and its variable name Tip: to use the name from the response viewer below, click "Set the selected text as Extractor Name".
Text Before	A text delimiter that occurs immediately before the value to be extracted. Tip: In the response viewer below, select a string before the Extractor value and click "Set the selected text as Text Before". If entering manually: for "new line", use \n; for "Tab", use \t
Text After	A text delimiter that occurs immediately after the value to be extracted. Tip: In the response viewer below, select a string after the Extractor value and click "Set the selected text as Text After". If entering manually: for "new line", use \n; for "Tab", use \t
Occurrence	To make the occurrence a constant integer, select Constant. To make the

Property	Description
Type	occurrence a integer within a range, select Random. An example of using a random occurrence: extract a random link to emulate VUs clicking the random link on the page.
Occurrence	The occurrence of the matching text to be extracted. The default is 1.
Max Occurrence	Maximum Random Occurrence
Min Occurrence	Minimum Random Occurrence
Use HTML Decoding?	To apply HTML-decoding to the Extractor value, select Yes. Example of HTML-decoding: converting "&>" to ">". The default is No.
Use URL Decoding?	To apply URL-decoding to the Extractor value, select Yes. Example of URL-decoding: converting: "%3F" to "?". The default is No.
Enforce URL encoding?	The default is No. When using an extractor in a parameter, StresStimulus automatically URL encodes its value when necessary. Select Yes to enforce the URL encoding of the extractor's value. Use this option with caution as it can result in double-encoding a parameter.
Use Escaped Hex Decoding?	To apply escaped hex decoding to the Extractor value, select Yes. In a response, some special characters may be escape hex encoded. An example of decoding: '\x23' to '#'. The default is No.
Recorded value	The value returned by the Extractor from the recorded response
Description	The Extractor description
Regular Expression	The regular expression with a single value <val> which will be extracted. Example: \w+\d="(?<val>.+)" returns a value of the name/value pair, where the name ends with a digit.
Header	The response header name, selected from the drop-down
Form Field	The form field name, selected from the drop-down
XPath query	Enter XPath query to extracts a value from an XML response
JPath query	Enter JPath query to extracts a value from a JSON response

Create Extractor

Toolbar

Button	Action
	Set the selected text as "Text Before"
	Set the selected text as "Text After "
	Set the selected text as an Extractor Name
	Create Text Delimited
	Find Previous (Shift+F3)
	Find Next (F3)
	Verify the Extractor
	Save the Extractor and close this window
	Save the Extractor and start a New one

Help Boxes

Create Extractor	To Create an Extractor:
	1. Select a session in the Test Case Tree or session grid.
	2. Select an Extractor Type from the list above.
	3. Configure Extractor's properties.
	4. Verify the Extractor.
	5. Click Save.
	For help with specific extractor types, check the light bulb on the right.
	See Also: How to Create an Extractor
Edit Extractor	To Edit the Extractor:
	1. Change Extractor's properties.
	2. Verify the Extractor.

	3. Click Save. For help with specific extractor types, check the light bulb on the right. See Also: How to Create an Extractor
Extractor Type	Extractor Type defines a text search rule. 1. Text Delimited type extracts a value that occurs in the response between two specified text strings. 2. Regular Expression type extracts a value that is found in the response using regular expression search. 3. Header type extracts a value of a specific response header selected in the Header drop-down. 4. Form Field type extracts a value of a specific web form field selected in the Form Field drop-down. 5. XPath or JPath query type extracts a value that is found in an XML or JSON response body respectively. See Also: Text Delimited Extractor Regular Expression Extractor Header, Form Field and XPath/JPath Extractor
Next / Previous Extractor	If more than one extractor value can be found in the response, continue clicking Next/Previous Occurrence until you find the correct value. Then click Set the Occurrence to properly adjust this property.

1.2.3.2   Datasets

Toolbar

Button	Action
	New - Create a new Dataset
	Create Authentication Dataset

	Import a data source as a new Dataset
	Edit the selected Dataset
	Export the Dataset to a .csv file
	Delete the selected Dataset

Help Boxes

Datasets	A Datasets is a predefined set of records. Datasets are used in request parameters to: - retrieve a value from the Datasets, - assigned the value to a variable and - replace a recorded value in the request with the variable. The variable name is .< column name>. See Also: Datasets
Dataset Commands	1.To add a Dataset, click "New" to create an empty Dataset that can be populated manually or by pasting values. Or Click "Import a data source as a new Dataset". 2.To create a dataset for Forms Authentication, click "Authentication Dataset". 3.To edit data, select a Dataset from the drop-down. 4.To edit the Dataset structure, click "Edit". 5.Other available operations are Export Data and Delete. Note: - URL encoding in data sources is supported. - For Basic, Windows Integrated (e.g. NTLM) or other Kerberos authentication use Authentication section. See Also: Datasets
Add/Edit Dataset Structure	To add a field, enter the field name and click

	"Add Field". Double-click the field to rename it To reposition, rename or delete a selected field, use the Up, Down, Rename or Remove buttons. To create or rename a Dataset, enter a one-word Dataset name. See Also: Datasets
Import Datasets	To import data sets from Excel, a text file or an SQL Server query, select the source on the left and fill out the corresponding form. Click Preview to see a preview of the dataset, and when you are ready to import the dataset, give it a unique name and click Import. See Also: Importing Datasets

1.2.3.3   Data Generators

T oolbar

Button	Action
	New - Create a new Data Generator
	Verify the value returned by the selected Data Generator
	Delete the selected Data Generator

Create Data Generator T oolbar

Button	Action

Button	Action
	Save the Data Generator and close this window
	Save the Data Generator and create a New one
	Verify the value returned by the Data Generator

Help Boxes

Data Generator Types	Data Generator Type determines what random value will be returned: Integer, Double, Date/Time, GUID or Text. See Also: Data Generators
Create Data Generator	To Create a Data Generator: 1. Select its Type from the list on the left. 2. Configure its properties. 3. Click Verify to test the returned value. 4. Click Save. See Also: Data Generators

Data Generator Properties

Property	Description
Name	The Data Generator name
Type	The Data Generator type
Min Value	The minimum generated value
Max Value	The maximum generated value
Format	A string specifying a format of presenting a value. For details about different data

Property	Description
String	type Formats, check "Formatting Types" in .NET
Description	The Data Generator description
Min Length	The minimum number of characters in the generated word
Max Length	The maximum number of characters in the generated word
Type	Select Random to generate random integers between the Min Value and Max Value. Select AutoIncrement to generate sequential integers starting from the Min Value; after the Max Value is reached, the next integer is the Min Value
When To Evaluate	Select On Iteration to generate a new value on every iteration (default). Select On Request to generate a new value on every request.

1.2.3.4   Functions

Toolbar

Button	Action
	New - Create a new Function Instance
	Delete the selected Function Instance

Help Boxes

Function Instances	A Function Instance returns a dynamic value that depends on the function type and the context where the function is called from.
	The value is assigned to a variable with the same name, which can be used to parameterize a request.
	The Function Instance is called before the issuing the request.
	See Also: Functions

Properties

Property	Description
Name	The Function Instance name
Function Type	Determines what internal variable or constant will be returned by a Function Instance
Use Unix Time format?	Select "Yes" to return the number of milliseconds that have elapsed since Jan-1, 1970. Select No (default) for more formatting options.
Time Offset (s)	Time offset in seconds from the current time (positive or negative). The default is zero.
Format String	A string specifying a format of presenting a value. For details about different data type Formats, check "Formatting Types" in .NET
Description	The Function Instance description

Create Function Instance

Toolbar

Button	Action
	Save the Function Instance and close this window
	Save the Function Instance and create a New one

Help Boxes

Function Types	Supported Function Types: - AgentName - name of the current Agent - AgentVUNumber - the current VU number within an Agent's pool of VUs - TestCaseName - the name of the current Test Case - AgentIterationNumber - the current iteration number executed by an Agent - URLNumber - the current URL number within a test case - AgentRequestNumber - the current request number issued by an

	Agent from the beginning of the test - Current DateTime - the current date/time - Current UTC DateTime - the current UTC date/time See Also: Functions
Create Function Instance	To Create a Function Instance: 1. Select a Function Type (described in the light bulb on the left). 2. Configure the Function Instance properties. 3. Click Save. See Also: Functions

Function Properties

Property	Description
Name	The Function Instance name
Format String	A string specifying a format of presenting a value. For details about different data type Formats, check "Formatting Types" in .NET
Description	The Function Instance description

1.2.4   Parameters

Toolbar (All parameterization controls)

Button	Action
💾	Save
🔄	Undo to Last Saved (Ctrl+Z)
📋	Restore to recorded

	Switch to Parameterization Editor
	Switch to Parameterization Grid
	Switch to Free Format Request Editor
	Hide autocorrelation parameter details
	Show autocorrelation parameter details
	Find and Replace parameters' values (Ctrl+F)
Text box	Find Value
	Find Next (F3)
	Find Previous (Shift+F3)
Label	Session Number

Parameter Context Menu

Icon	Command	Description
	Edit Parameter	Edit the selected object
	Delete Item(s)	Delete the selected object(s)

Header Parameterization Grid

Column	Description
Header	Request header name
Recorded Value	Request header recorded value
Replace with	Parameterization expression replacing the recorded value

Query String Parameterization Grid

Column	Description

Column	Description
Query Parameter	Query string parameter name
Recorded Value	Query string parameter value
Replace with	Parameterization expression replacing the recorded value

Web Form Parameterization Grid

Column	Description
Form Field	Form Field name
Recorded Value	Request header recorded value
Replace with	Parameterization expression replacing the recorded value

Global Find and Replace ... (Ctrl+F)

Help Boxes

Parameterization Controls	Which Parameterization Control to use: - Parameterization Grid: for configuring name/value pair parameters. - Parameterization Editor: for configuring name/value pair parameters with long values or when Find and Replace is needed. - Free Format Request Editor: for configuring free format requests. See Also:

	Parameterization Controls
Parameterization Grid	Parameters change recorded requests during the replay. The new values are derived from Variables. To create a Parameter: 1. Select a request in the Test Case Tree. 2. Select the tab above for a necessary request part: Header, URL and Query, or Body. 3. Click "Replace with" column of the Parameter. 4. In the appeared Variable Picker, select the Variable. See Also: Parameterization Grid
Parameterization Editor	Parameterization editor displays name/value pairs as - Read only blue "name line" and - Editable "value line" To edit data: 1. Optionally select text in a "value line" that should be replaced. 2. Right-click in the "value line" and select a Source Variable in the appeared Variable Picker. - To find a text, enter it into the "...Find" box and click Find Next. For advanced search click Global Find and Replace. - Click Save to save the changes.. - Click Undo to the Last Saved to discard the changes. See Also: Parameterization Editor
Free Format Request Editor	Select or search the text to be parameterized. Right-click and in the appeared Variable Picker, select a Variable. - To find text, enter it into the "...Find" box and click Find Next. For advanced search click Global Find and Replace. - Click Save to save the changes.

	- Click Undo to discard the changes.
	- Click Restore to restore the recorded request.
	See Also:
	Free Format Request Editor

1.2.4.1   Variable Picker

Help Boxes

Variable Picker	- Select a Variable in the Extractor,
	Data Generator or Function category.
	- Or select a Variable as a Dataset,
	field and databinding method.
	The Variable will be injected into the
	request and will replace any selected text.
DataBinding Methods	The databinding method determines the order of assigning dataset
	rows to request parameters.
	- Request-Bound databinding method: Every parameter requested
	by any VU in any iteration gets a subsequent dataset row.

	- VU-Bound databinding method: Every VU gets a subsequent dataset row used f+G77 or all its parameters requested in all iterations.
	- Iteration-Bound databinding method: Every iteration gets a subsequent dataset row used by all VUs in all requested parameters.
	- Iteration-Request-Bound databinding method: Every subsequently requested parameter in every iteration gets the subsequent dataset row shared by all VUs.
	- VU-Iteration-Bound databinding method: Every VU in every iteration gets a subsequent dataset row used in all its requested parameters.
	- Parameter- Bound databinding method: Every requested parameter gets a subsequent dataset row shared by all VUs in all iterations.
	- Random databinding method: Every request parameter gets a random dataset row.

1.2.5   Response Validators

Toolbar

Button	Action
	Create a Validator for a response selected in the Test Case Tree or the session grid
	Show the selected Validator in the Test Case Tree
	Show the response associated with the Validator in the session grid
	Move the selected Validator to the selected response
	Clone the selected Validator to the selected response(s)
	Delete the selected Validator(s)

Help Boxes

Validators	A Validator is a rule of comparing a response with a text pattern. In case of mismatch, a custom error is raised. See Also: Validators

Validator Context Menu

Icon	Command	Description
✏️	Edit Validator	Edit the selected object
✖️	Delete Item(s)	Delete the selected object(s)
	Show Properties	Show Property Grid on the bottom
	Hide Properties	Hide Property Grid on the bottom

Validator Properties

Property	Description
URL	The URL of the response that will be validated
Text to search	Text/HTML or regular expression to search for in the response
Is text a regular expression?	Select Yes, if the validation string is a regular expression.
Fail If	Choose whether to raise the error when the string is Found or Not Found in the response.
Scope	Set Scope to "Selected Response" to create a Validator for a request selected in the Test Case Tree or in the session grid. Set Scope to "All Responses" to create a global Validator.
Description	Validator Description
Action if failed	Choose the action to perform if validation failed. "Continue" to continue the

	iteration or "Abort Iteration" to stop the current iteration and mark it as failed, Which means that it will be counted toward started and failed iterations. Failed transactions are excluded from the test metrics.
Continue	Abort Iteration

1.2.6   Verify & Auto-config

 Verify & Auto-config T oolbar

Button	Action
	Go back to the Main tab with the Workflow Tree
P	Run Parameter Finder.

   Verify & Auto-config Help Boxes

Verify Test Case	When verifying the Test Case: 1. The test runs one time in debug mode. Test Configuration settings do not affect this run. 2. Replayed sessions are automatically compared with the corresponding recorded sessions, and deeply analyzed. 3. Errors, warnings, configuration recommendations and other diagnostics are displayed in Session Verification Tree and Extractor Verification Tree. - To change the VU, enter a different VU number. - To stop Verify earlier, specify a session number, after which to stop. - To Verify without previewing of web pages, click the Quick Verify box. See Also: Verifying Test Case
Verify Results	Parameter Finder finds possible missing extractors and parameters. Creating them can fix configuration errors and make test more realistic. To resolve verification errors, run Parameter Finder to find missing extractors and parameters or create them manually.

Click Verify Description to see the details of the verify run.

See Also:
Parameter Finder
Resolving Errors and Warnings

1.2.6.1   Session Verification

Session Verification Toolbar

Button	Action
	Expand All
	Collapse All
	Compare the selected recorded and replayed sessions
	Click to show all verified sessions
	Click to show sessions with errors
	Click to show sessions with warnings
	Click to show sessions with Notifications
	Find Previous (Shift+F3)
	Find Next (F3)
	Find sessions by content (Ctrl+F)
	Clear Search

Session Verification Help Boxes

Session Verification Tree	Session Verification Tree matches the recorded and replayed requests in the Test Case.

	- To compare recorded and replayed sessions selected on the tree, click Compare button. - To view session content, double-click Recorded or Replayed node. See Also: Comparing Sessions
Session Filtering	To display a subset of sessions, click one of the filtering buttons on the toolbar: - URLs: all sessions; - Errors: sessions with errors related to the test configuration; - Warnings: sessions with issues that may be related to the test configuration; - Notifications: sessions with issues unrelated to the test configuration.

1.2.6.2   Parameter Finder

 Parameter Finder Toolbar

Button	Action
	Click to Group by Extractors
	Click to Group by Requests
	Expand All
	Collapse All
	Parameter Creator: Auto-Configure the Extractor and all Parameters in the selected node
	Parameter Creator: Auto-Configure all Parameters in the selected node
	Auto-Configure all Extractors and Parameters
	Delete the selected Parameter Recommendation

Parameter Finder Help Boxes

Verify Results	Parameter Finder finds possible missing extractors and parameters. Creating them can fix configuration errors and make the test more realistic. To resolve verification errors, run Parameter Finder to find missing extractors and parameters or create them manually. Click Verify Description to see the details of the verify run. See Also: Parameter Finder Resolving Errors and Warnings Verifying Test Case
Parameter Finder Tree	Parameter Finder Tree displays possible missing extractors and parameters. It has two views 1. Group by Request view displays: a) On each parent node, a request requiring one or several parameters; b) On each child node, a parameter with matching extractor. 2. Group by Extractor view displays: a) On each parent node, an extractor that can be used in one or several parameters. b) On each child node, a parameter using the extractor. Note: To copy selected object content, hit (Ctrl+C). See Also: Parameter Finder
Parameter Finder Tab	To create Extractors and Parameters discovered by the Parameter Finder, use the "Parameterization Tool". It creates these objects one-by-one. Auto Configurator creates all Extractors and Parameters at-once. See Also: Parameter Creator

	Auto-Configurator

1.2.6.3 Extractor Verification

Extractor Verification Toolbar

Button	Action	Description
	Edit	Edit the selected extractor
	Show on Tree	Show the selected Extractor in the Test Case Tree
	Show Session	Show the associated with the Extractor response in the session grid
	Delete Extractor	Delete the selected extractors and associated parameters

Extractor Statuses

Status	Description
	The extractor is OK.
	The extractor is not found in the response.
	The extractor's value is not used in the Test Case.
	The recorded and replayed extractors are the same.

Extractor Verification Help Boxes

Extractor Verification Tree	The Extractor Verification Tree is generated When running "Verify". It displays extractor values and the following exceptions: - The extractor is not found in the response. - The extractor's value is not used in the Test Case. - The recorded and replayed values are the same. The extractors with exceptions are automatically checked for easy removal, as some of them may be unnecessary. See Also:

	Verifying Test Case

Extractor Verification Properties

Property	Description
Response	Response associated with the Extractor
Extractor name	The name of the extractor
Value	The value returned by the extractor during the verify

1.2.7   Managing Test Case(s)

Toolbar

Button	Action
	Open a session file as a Test Case
	Import Test Cases from another Test
	Click to view the selected Test Case and unlock it for changes
	Clone the selected Test Case
	Delete the selected Test Case
	Export the test case as a Visual Studio Web Test (.webtest)
	Export Test Case as an HTTP archive (.har)

Help Boxes

Multi-Test Cases	Multi Test Cases are used to emulate different categories of users. - Test Cases are executed concurrently. - VUs are distributed between the Test Cases proportionate to their Mix Weight properties. - To start configuring or reviewing the selected Test Case, double-click it or click "Click to view …" button on the toolbar.

	After that the entire Build Test Case section on the Workflow Tree will be associated with this Test Case. Note: Selecting the Test Case as Current, does not impact concurrent execution of multi-test cases. See Also: Managing Test Case(s) Editing and Deleting a Test Case
Multi-Test Case commands	- To create a new Test Case, click "Record" or "Open session file" and select an .saz or .har file. - To import Test Cases from another Test, click Import. - To clone the selected Test Case, click "Clone Test Case". - To delete the selected Test Case, click Delete. - To change the properties of the selected Test Case, modify them in the property grid below. See Also: Editing and Deleting a Test Case

Test Case Properties

Property	Description
Name	The Test Case name.
Recorded On	The date and time when the test case was recorded.
Description	The Test Case description.
Mix Weight	The relative frequency (in units) of the Test Case replays in the mix. Every VU is assigned to a specific Test Case selected in a round-robin order, while skipping some of them to achieve the VU distribution corresponding to the mix weights.
User Group	If user groups are assigned in the server authentication grid, select the user group that will execute this test case. Leave blank to have VUs not assign to any user group execute this test case.

1.2.7.1   Test Case Groups

Toolbar

Button	Action
	Create a Test Case Group
	Edit the selected Test Case Group
	Delete the Test Case(s) from the Test Case Group

Help Box

Test Case Group	When at least one Test Case Group is created, Sequential-Concurrent TC mixing model is used:
	- Test cases in a TC Group are executed sequentially.
	- Multiple TC Groups are executed concurrently.
	- VUs are distributed between the TC Groups proportionate to their Mix Weight properties.
	- Only test cases included in TC Group(s) are executed.
	To go back to the Concurrent TC mixing model, delete all TC Groups.
	See Also: Sequential Test Case Groups

Test Case Groups Dialog Commands

Button	Action
	Add Test Case(s) to the Test Case Group
	Delete Test Case(s) from the Test Case Group
	Move Test Case Up for earlier execution
	Move Test Case Down for later execution

Test Case Group Properties

Property	Description

Name	The Test Case Group name
Description	The Test Case Group description
Mix Weight	The relative frequency (in units) of the Test Case Group replays in the mix. Every VU is assigned to a specific Test Case Group selected in a round-robin order, while skipping some of them to achieve the VU distribution corresponding to the mix weights.
Cache Control	Select "Enabled" to emulate browser caching and session management. Select "Disabled" to emulate browsers with disabled caching (all requests will be sent) and restarting browsers before starting a new iteration (browser sessions will not persist across test iterations).
New VU %	Percentage of the New vs. Returning VUs. Note: (a).On the 1-st iteration, new VUs will have an empty cache, just as a first time user. All requests will be sent. (b).On the 1-st iteration, returned VUs will have a primed cache. Caching rules for each request will be determined based on server caching headers. (c). On the subsequent iterations, all VUs are treated as returned VUs.
VU restarting browsers %	Percentage of VUs restarting browsers before starting new iteration. For these users, browser sessions will not persist across the test iterations.

1.3   Configure Test

The **Configure Test** section includes the following nodes:

		Load Pattern	Configure load
		Test Duration	Configure Test completion criteria
		Browser Type	Configure Browser Mix
		Network Type	Configure Network Mix
		Load Agents	Configure Load Agents
		Server Monitoring	Configure performance monitoring
		KPI	Configure Key Performance Indicator monitoring
		Windows Servers	Configure Windows Server monitoring
		Linux/Unix Servers	Configure Linux/Unix Server monitoring

		Load Agents	Configure Load Agent monitoring
		Result Storage	Configure Result Storage settings and the amount of saved data
		Other Options	Advanced Options
		Script Editor	Modify Test Script

Help Boxes

Configure Test	Navigate through every "Configure Test" item and select desired test parameters.

Property Grid

Property	Description
Test Run Name	A one-word Test Run Name used as a suffix following a time-stamp of the next test run displayed in the "Analyze Results" section. If the Test Run Name is empty, the test file name is used as a suffix.
Test Description	Test Description included into the test result Summary view

1.3.1   Load Pattern

Help Boxes

Load Pattern	Load pattern defines dynamics of virtual users (VU) throughout the test. See Also: Load Pattern

Load Pattern Properties

Property	**Description**
Load Pattern	Select "Steady Load" to keep a steady number of VUs. Select "Step Load" to ramp-up the number of VUs on every step.

Number of VU	The constant number of VUs emulated throughout the test
Start VU	The initial number of VUs in the beginning of the test
Step VU Increase	The number of VUs added on every step
Step Duration (s)	The time interval between increasing VU count
Max VU	Maximum VU count - Note: Test can complete before reaching "Max VU" if the Test Duration is not long enough.
Over (s)	The amount of time taken in the beginning of each step to gradually add VUs. For instant increase, use zero.

1.3.2   Test Duration

Help Boxes

Test Duration	Set the test completion criteria. After reaching this condition, the test will stop. See Also: Test Duration

Test Duration Properties

Properties	Description
Test Completion Condition	Select the test completion condition from the drop-down.
How to count iterations	Select Per VU to set the iteration limit for each VU. Select Total to set the overall iteration limit.
Max. iterations	After the specified number of iterations is issued, the Test waits until all responses are received and stops.
Load generation time (hh:mm:ss)	Enter the duration of load generation, after which no request will be issued.
After the Completion Condition is	After the specified test completion condition is reached, depending on this selection, test will stop, will wait until all pending responses are received, or will wait for started iterations to complete.

Properties	Description
reached	
Warm-up time (s)	The warm-up period at the beginning of the test is necessary to prepare server for normal working conditions. During the warm-up period the number of VU is gradually ramped-up, server cache is populated, and necessary modules are loaded into the memory. During the warm-up period performance metrics are not collected.

1.3.3   Browser Type

T oolbar

Button	Action
	Add - Click to add a browser to the mix - Then configure its settings
	Delete - Click to delete the selected browser from the mix

Supported Browser Types

	Category	Platform	Browser
	Desktop	Windows Linux Mac	Chrome Firefox Internet Explorer Microsoft Edge Opera Safari
	Smartphone	Android iPhone Windows Phone Blackberry	HTC Sensation Samsung Galaxy Sony Xperia iPhone HTC Nokia Lumia

			Blackberry Bold 9900
▭	Tablet	Samsung iPad	Galaxy Tab iPad
▤	Non-Browser App		
⚙	Custom		

Help Boxes

Browser Type	Configure web browser settings. If necessary, add more web browsers to the mix. Tip: How StresStimulus emulates web browsers: (a) It maintains the configured connections limits. (b) It injects the appropriate user-agent string into the requests. (c) It maintains the browser mix distribution, if more than one browser is selected. See Also: Browser Settings

Browser Properties

Property	Description
Browser Type	Select a web browser type, "Non-browser Client" for a RIA client, such as Silverlight or Flex-based application, or "Custom".
Mix Weight	Relative frequency (in units or percents) of using this browser by VUs
Replace User-Agent string	Select "True", to use a User-Agent string of the selected browser type, instead of the recorded string. Select "False", to keep the recorded string.
User Agent	If replacing the recorded User-Agent string, enter a custom string.
Connection limit per host	To set custom browser performance, enter the maximum number of TCP connections per host.

Connection limit per proxy	To set custom browser performance, enter the maximum number of TCP connections across all hosts.

1.3.4   Network Type

Toolbar

Button	Action
	Add - Click to add a network to the mix - Then configure its settings
	Delete - Click to delete the selected network from the mix

Network Types

	Type	Network
	Lan	Ethernet 10Mbps Fast Ethernet 100Mbps Gigabit Ethernet
	Wireless	WiMax Wireless 802.11g Wireless 802.11n
	Fiber	Fiber 50Mbps Fiber 100Mbps Fiber 150Mbps
	Mobile	GPRS Edge 3G 3G+ H+ 4G LTE 5G

⌂	xDSL	ADSL
		ADSL Lite
		ADSL2
		ADSL2+
		ADSL2+M
		VDSL
		VDSL2
		VDSL2 Annex Q
☎	Legacy	56Kbps Modem
		DS0
		ISDN 128Kbps
		T1
		T2
		T3
⚙	Custom	

Help Boxes

Network Type	Configure network settings. If necessary, add more networks to the mix. Tip: Network type other than LAN is emulated by injecting a certain wait time into every request and response, weighted to its size and the network type bandwidth. See Also: Network Settings

Network Properties

Property	Description
Network Type	Select a network type or "Custom" from the drop-down.

Mix Weight	Relative frequency (in units or percents) of using this network by VUs
Upload Bandwidth (kbps)	Enter the upload bandwidth (kbps)
Download Bandwidth (kbps)	Enter the download bandwidth (kbps)

1.3.5   Load Agents

Toolbar

Button	Action
	Add a Load Agent connection
	Edit the selected Load Agent connection
	Test connections to the Load Agents with non-zero VU weights
	Reset the Selected Agent
	Delete the selected Load Agent connection

Help Boxes

Load Agents	Load Agents are computers emulating virtual users in the distributed test, orchestrated by this controller. To create a Load Agent: 1. On a remote computer, install StresStimulus, and in the StresStimulus menu -> Agent Options, enable Agent Mode. 2. On this computer, add a connection to the Load Agent. See Also: Attaching Agents to Controller
Load Agents	Load Agents are computers emulating virtual users in the distributed test, orchestrated by this controller. To create a Load Agent: 1. On a remote computer, install StresStimulus, and in the

	StresStimulus menu -> Agent Options, enable Agent Mode. 2. On this computer, add a connection to the Load Agent. To set the portion of the total number of VUs on this Load Agent, change its mix weight property. To set the total number of VUs in the test, navigate to the Load Pattern section. See Also: User-Agent Attaching Agents to Controller

Load Agent Properties

Property	Description
Agent Name	The Load Agent Name
StresStimulus version	The version of StresStimulus installed on the agent
Host / IP Address	The Load Agent Host - Enter a network computer name or IP address without "//". Example: AGENT1 or 10.2.2.169.
Port	The TCP port used by the controller to communicate with this agent. The default port is 49998.
Mix Weight	Relative number of VUs (in units or percents) emulated on the Load Agent. To disable the Load Agents, set its mix weight to zero.
Allocate at least one thread per VU	Starting thread count is the number of threads created automatically when the test is launched. By default, it is equal to the number of VUs. If more threads are needed, the load engine will gradually create more threads while checking available system resources. Select No to allow .NET Framework to allocate a default (typically smaller) number of starting threads.
Allocate at least one thread per VU	Starting thread count is the number of threads created automatically when the test is launched. By default, it is equal to the number of VUs. If more threads are needed, the load engine will gradually create more threads while checking available system resources. Select No to allow .NET Framework to allocate a default (typically smaller) number of starting threads.
Minimum starting threads	To increase the Starting thread count, set this property to a higher number. This property will be disregarded if it is smaller than the starting thread count determined as explained in the previous property.

VUs	Constant number of VUs
Start VUs	Starting number of VUs
Step VU Increase	VU Step increase if the Step Load Pattern is used
Max VUs	Maximum VUs if the Step Load Pattern is used
Username	Username to access Remote Agent
Password	Password to access Remote Agent

1.3.6   Monitoring

1.3.6.1   Windows Servers and Agents

Toolbar

Button	Action
	Add A Machine To Monitor
	Edit The Performance Counters
	Delete Selected Objects
	Fine Previous
	Find Next

Help Boxes

Server or Agent Monitoring	During the test run you can monitor multiple performance counters on the web, application and database servers, as well as agents. Real-time graphs and performance values will be displayed on the real-time dashboards and in the performance reports.
	- Click "Add" to add a Server with default set of counters. - Click "Edit" to add or delete performance counters to the selected server. - Click "Delete" to delete the selected object(s).
	See Also:

	Windows Servers Monitoring Linux/UNIX Servers Monitoring Threshold Rules
Add a Machine for Monitoring	Enter a machine IP address or computer name without "//". Example: 10.2.2.169 or WEB_SRV5

Property Grid

Name	Description	
Machine	A network computer IP address or computer name without "//"	
Domain	Network Domain Name	
UserName	User Name on the network computer	
Password	Password	
Category	Performance Counter Category	
Counter	Performance Counter Name	
Instance	Performance Counter Instance	
Enable Threshold?	Select Yes to enable threshold. Default is No.	
Warning Threshold	Enter Warning Threshold value	
Critical Threshold	Enter Critical Threshold value	
Alert if Over?	Select Yes to indicate that exceeding a threshold is a problem. Select No to indicate that falling below a threshold is a problem.	
Display Name	Performance counter display name	

Add Performance Counters

Help Boxes

Add Windows Server Performance Counters	1. Select a performance object, counter, and instance.

	2. Click "Add" to add it to the New Counter List.
	Note: The performance counters are the same as in Windows Perfmon application.
	See Also:
	Windows Server Monitoring
Add Agent Performance Counters	1. Select the local or remote Agent. 2. For remote Agents, enter an IP address or computer name without "//". Example: 10.2.2.169 or WEB_SRV5 3. Select a performance object, counter, and instance. 4. Click "Add" to add it to the New Counter List. See Also: Windows Server Monitoring
New Counter List	Highlight a counter below to see its description. Click "Delete" to remove the highlighted counters from the New Counter List. Click "Save" to add the New Counter List to the Test. See Also: Server Monitoring

1.3.6.2   Linux/UNIX Servers

Help Boxes

Add Linux/Unix SNMP Performance Counters	1. Enter a host IP address or name. 2. Change Community, if necessary. 3. Select a counter from the drop-down list. 4. To add counters which are not on the list, enter OID. 5. Enter or edit the counter name. 6. Click Test to test the counter. 7. Click "Add" to add it to the New Counter List. See Also: Linux/UNIX Servers Monitoring

Listed SNMP performance counters

—CPU Counters —
Percentage of user CPU time
Percentage of system CPU time
Percentage of idle CPU time
— Memory counters—
Total swap size
Available swap space
Total RAM
Total RAM free
Total RAM buffered
Total cached memory

1.3.7   Result Storage

Properties

Property	Description
How much data to store	Select All to store the fullest dataset. Select Partial to store all data except the content of the individual HTTP sessions. If select None, no data will be stored in the database, and only the last test result will be available until StresStimulus is closed.
Data Storage	Select the test result data storage from the drop-down. Note: SQL Server CE capacity is limited to 4 GB.
SQL Server connection string	Click … to enter the SQL Server connection information in the pop-up window.
Purge request bodies	Purging bodies of test sessions' requests saves memory. Select All, to purge all bodies. Select None, to keep all bodies. Select Non-Errors to keep all bodies with Errors
Purge response bodies	Purging bodies of test sessions' responses saves memory. Select All, to purge all bodies. Select None, to keep all bodies. Select Non-Errors to keep all bodies with Errors. Select Static Mime Types, to purge bodies of images and other static resources.
Save sessions from agents?	In distributed tests with SQL Server CE-based storage, the content of the sessions generated on the agents is stored on the agents. Select Yes, to copy this content to the controller. This will allow generating waterfall charts for VUs emulated on the agent. When the network bandwidth is limited, select No, to reduce the traffic between agents and controller.

Help Boxes

Result Storage	Test results are stored in a database. Configure Data Storage type, and amount of data to store See Also: Test Result Storage
Connection Settings	Click Create/Check DB to create a new database or verify connection to the existing database. Click OK to set the database as data storage for the Test. Click Cancel to go back without changes. See Also: Test Result Storage

1.3.8   Test Pass/Fail Qualification

Help Boxes

Test Pass/Fail Configuration	You can configure several test quality criteria. When at least one of such criteria missed, the test is qualified as Failed. To create a test quality criteria, in the property grid enable a Pass / Fail condition and specify its acceptable limit. See Also: Configuring Test Pass/Fail Qualification

Property Grid

Property	Description
Page Goal Misses	Enter Yes if Page Goal Misses is subject to the test's Pass / Fail condition.
Page Goal Threshold	Enter % of Page Goal Misses that triggers the Fail condition. Enter 0 to fail the test with a single Page Goal violation.
Transaction Goal Misses	Enter Yes if Transaction Goal Misses is subject to the test's Pass / Fail condition.
Transaction Goal Threshold	Enter % of Transaction Goal Misses that triggers the Fail condition. Enter 0 to fail the test with a single Transaction Goal violation.

Property	Description
Request Errors	Enter Yes if Request Errors are subject to the test's Pass / Fail condition.
Request Error Threshold	Enter % of Request Errors that triggers the Fail condition. Enter 0 to fail the test with a single Request Error violation.
Request Timeouts	Enter Yes if Request Timeouts are subject to the test's Pass / Fail condition.
Request Timeout Threshold	Enter % of Request Timeouts that triggers the Fail condition. Enter 0 to fail the test with a single Request Timeout violation.

1.3.9   Other Options

Properties

Property	Description
Graph sample rate (s)	Enter how often remote computers are polled and graph are refreshed. Recommended value is 10s with agents and 3s without the agents. Increase "Sample Rate" for long tests.
Pre-run Command Line	A command line to execute before the test starts
Pre-run Command Timeout	A timeout limit for the pre-run command to complete
MIME Types requested sequentially	Click the drop-down and enter MIME types whose requests must be issued only after receiving all previous responses (sequentially). Some MIME types (e.g. Text/HTML) are always requested sequentially. You can enter additional MIME types to prevent dependent requests of these types from being requested in parallel with other dependent requests on a page. Separate multiple entries by ",". For example, enter "image,video" to request all images and videos sequentially; enter "video/mp4" to Request MP4 video sequentially. After modifying this property, launch test wizard and rerun autocorellation.
Enable Dynatrace integration?	Select Yes to add the x-dynaTrace header to each issued request.

Help Boxes

Other Options	For information about properties in this section, check the following sources:
	Pre-run command line
	Dynatrace Tntegration

1.3.10   Script Editor

Toolbar

Button	Action
	Save Script (Ctrl+S)
	Save and Exit Script Editor
	Validate against SSScript XSD
	Show XSD, the SSScript schema document
	Cut (Ctrl+X)
	Copy (Ctrl+C)
	Paste (Ctrl+V)
	Undo (Ctrl+Z)
	Redo (Ctrl+Y)
	Find (Ctrl+F)
	Find Next
	Find Previous
	Highlight All Matches
	Clear Highlights
	Bookmark (Ctrl+F2)
	Bookmark Next (F2)
	Bookmark Previous (Shift+F2)

Help Boxes

Script Editor	Script is an XML representation of the Test Object Model (TOM).
	Test modifications can be completed by editing the script or by changing the corresponding settings in the UI.
SSScript XSD .	SSScript XSD is an XML schema of StresStimulus Scripts. It is used to validate Test scripts and to find errors.
	SSScript XSD is provided here as a reference for script development

1.4   Run and Monitor Test

In order to start the test click **Run** on the Workflow Tree toolbar or click **Run and Monitor Test** (b) on the Workflow Tree. Runtime Dashboard will appear.

1.4.1   Runtime Dashboard

Toolbar

Button	Action
🛑 Stop	Click Stop to Abort the Test Run
⏸	Click Pause to suspend the Test
▶	Click Resume to resume the Test
➕	Click to add VUs to the Test
↪	Skip pending requests (trigger a timeout) and continue the test
📋	Retrieve sessions from the Test Log (delayed)
🟢	Health Monitor - Normal

🟡	Health Monitor - High Load. CPU utilization approaching exceeds the acceptable range
🔴	Health Monitor - Overloaded. Stop unessential processes or reduce the number of VUs
⊞	Select Graph Layout

Graph Layouts

Option	Description
☐	One Graph
⊟	Two Horizontal Panels
⊞	Two Vertical Panels
☰	Three Horizontal Panels
�III	Three Vertical Panels
⊞	Three Panels Oriented Left
⊞	Three Panels Oriented Right
⊞	Three Panels Oriented Top
⊞	Three Panels Oriented Bottom
☰	Four Horizontal Panels
IIII	Four Vertical Panels
⊞	Four Panels

Help Boxes

Graphs	The Graphs display instant performance characteristics and performance counter's data, plotted with the frequency defined by the Sample Rate period.
	- To select the graph panel layout, click "Select Graph Layout" - To select which graph to display in a graph panel, click the drop-down above it.

	For more graph commands, right click a graph. See Also: Runtime Dashboard Agents and Test Cases Progress Grid
Test Run Commands	- To stop the test, click "Stop". - To Pause/Resume test run, click "Pause/Resume". - To increase VU count on demand, set the VU adjustment value and click "+". - To abandon pending requests, click "Skip". Note: - VU Adjustment works with a "Steady Load" pattern only. See Also: Runtime Dashboard Controlling the Test
Test Engine Health Status	Help Box – Test Engine Health Status@@ For accurate load testing, CPU utilization should not exceed 85%. - Green: Normal. CPU Utilization is under 85%. - Yellow: High Load. CPU utilization is 85-95% and is approaching the acceptable limit. - Red: Overloaded. CPU utilization exceeds 95%. Metrics accuracy can be impaired. Stop unessential processes or reduce the number of VUs. See Also: Monitoring Test Progress and Health

1.4.1.1   Graphs

Graph Context Menu

Icon	Name	Description
🔍	Un-Zoom One	Undo one Zoom
🔍	Un-Zoom All	Full zoom-out

	Unhide All Curves	
	Maximize Graph	Switch this graph to the one panel layout
	Show sessions in range	Show sessions sent/received during the displayed time range (1 minute delayed)
	Copy Image	Copy Image to the clipboard
	Save Image As	Save graph as an image
	Print Graph	Print graph
	Export Graph CSV	Export data points to a CSV file

Curve Context Menu

Icon	Name	Description
	Hide All but This	Hide all curves except the selected one
	Copy Curve Data	Copy curve datapoints to the clipboard
	Export Series CSV...	Export curve datapoints as CSV

Available Graphs

Name	Details
KPI	Show sessions sent/received during the displayed time range
Windows server(s) Performance Counters	
Pages	
Transactions	
Test Cases	

Help Boxes

Graph context menu	To show sessions sent/received within a time range: 1.Select the time range to zoom it to a full graph 2.Click "Show sessions in range…" The sessions will be displayed in the session grid. Note: The test log is updated with a one minute delay. To zoom-out one/all step, click Un-Zoom One/All. To stop/resume time auto-scrolling, scroll to the left/right. To show hidden curves, click "Unhide". Other commands: - Copy, Save, Print Graph Image - Export Graph datapoints For more options, right-click a curve.
Graph curve context menu	To hide all but the selected curve, click "Hide". To unhide all curves, in the graph context menu, click "Unhide". To copy or export core data, click Copy or Export.

1.4.1.2   Curve Grid

Help Boxes

Curve Grid context menu	To expand / collapse curve rows, double-click a graph row or click on the plus / minus image. To show/hide a curve on a graph, check /uncheck box on the corresponding curve row. To highlight a curve on a graph, click the curve name on the corresponding curve row.

Context Menu

Name	Description
Highlight Curve	Highlight the curve on the graph

Name	Description
Highlight All Curves But This	Show just this curve on the graph
Unhide All Curves	Show all curves on the graph

Curve Grid

Column	Description	Tabs
Visible	Check/uncheck the box to show/hide the curve	All
Curve	The name of the parameter represented by the curve	All
Color	The curve color	All
Range	The scale of the chart axis for this parameter	All
Min	Minimum value of the curve - datapoint aggregation (Sortable)	All
Max	Maximum value of the curve - datapoint aggregation (Sortable)	All
Avg	Average value of the curve - datapoint aggregation (Sortable)	All
Last	The last value of the curve - datapoint aggregation (Sortable)	All
Warnings	Number of threshold violation warnings (Sortable) **Ent** **SP**	KPI, Agents
Errors	Number of threshold violation errors (Sortable) **Ent** **SP**	KPI, Agents
Missed Goals	Number of missed goals (Sortable) **Ent** **SP**	Page,Transaction
Iterations	The number of times this Transaction or Page was completed successfully **Ent** **SP**	Page,Transaction

1.4.1.3   Test Progress Panel

Parameters

Name	Description
Time	The time elapsed from the beginning of the test.
Users	The number of instantiated VUs.
Iterations Started	The number of started test iterations.

Name	Description
Iterations Passed	The number of Iterations in which all responses were received
Iterations Failed	The number of failed (aborted) iterations
Requests Sent	The number of issued requests.
Requests Pending	The number of issued requests, which responses are not received yet.
Responses OK	The number of received responses excluded errors and timeouts
Errors	The number of errors.
Timeouts	The number of timeouts.
SQL CE Capacity used	The percentage of the 4 GB storage limit used to store test data accumulated up to this point. If SQL CE capacity used can reach 100%, learn how to Reduce Test Storage Use.

Help Boxes

Test Progress Panel	Test Progress Panel displays test progress. parameters. For more information, check Monitoring Test Progress and Health If SQL CE used capacity used can reach 100%, learn how to Reduce Test Storage Use

1.4.1.4   Agents and Test Cases Grid

Column	Description
Name	The Test Case or Agent Name
Users	The number of active VUs
Iterations Started	The number of started test iterations
Iterations Passed	The number of test iterations completed successfully
Iterations Failed	The number of test iterations failed

Requests Sent	The number of issued requests
Responses Received	The number of received responses
Errors	The number of errors
Timeouts	The number of timeouts

1.5   Analyze Results

1.5.1   Opening Previous Results

Toolbar

Button	Action	Description
	Refresh Previous Results	Click to refresh the Previous Results list
	Import Result	Click to open an SQL CE .sdf file
	Open Result	Open the selected result in a new tab
	Select All	
	Unselect All	
	Compare Tests	Generate a multi-test report for comparing selected results
	Configure Result Storage settings	
	Delete the checked results	

Help Boxes

Previous Results	The list below displays the Results of previous test runs.
	- To refresh the result list, click "Show Previous Results".
	- To load the selected Result in a new result tab , click "Open" or double-click the Result.

	- To compare several Results, check boxes next to them and click "Compare Tests".
	- To delete Results, check boxes next to them and click "Delete".
	- To rename a Result, right-click and select Rename.
	- To change the data storage settings or the amount of the saved data, click "Configure Result Storage settings".
	See Also:
	Opening Previous Results
	Comparing Tests
	Test Result Storage

Context Menu

Icon	Name	Description
	Open Result	Open Results in a new tab
	Rename	Rename the Test Case Results
	Sort by Name	Sort Test Results by Name (Asc/Desc)
	Sort by Date	Sort Test Results by Date (Asc/Desc)

Property Grid

Property	Description
Data Storage Type	The type of repository storing the result
Result name	The name automatically created for every test run. In SQL CE, it's the name of the .sdf file.
Test Run Description	Test Run Description, displayed in the test result Summary view
Test Run Comment	Test Run Comment, not displayed on the test result
Location	SQL Server CE file name
Date	The test run date

Property	Description
Size (KB)	The SQL Server CE file size
Test run description	Test Run Description, displayed in the test result Summary view
Test Run Comment	Test Run Comment, not displayed on the test result

1.5.2   Test Result Tab

Toolbar

Button	Action	Description
Σ	Summary	Test Results at-a-glance
	Graphs	Graphs of Key Performance Indicators and Performance Counters
	Details	Details
	Errors	Errors
	VU Activity	VU Activity Chart
	Waterfall	Waterfall Chart
	Select Layout	Select Layout
	Show Sessions	Show sessions matching selection criteria
	External report	Create external report
	Back to Previous Results	Back to Previous Results

Help Boxes

Test Result Views	Click a button on the left to select one of the following test result views: Summary, Details, Graphs, Error, VU Activity, Waterfall

	In the selected view, right-click for more options and help information. See Also: Test Result Tab
Other Test Result Commands	- To select a graph or grid panel layout, click "Select Layout" - To selected sessions from the Test Log, click "Show Sessions " - To generate a report, click "External Report" - To select a Multi-document (default) or a Single-document report option, click a drop-down. See Also: Query Log External Reports

1.5.2.1   Graphs

Graph Context Menu

Icon	Name
	Un-Zoom All
	Un-Zoom One
	Unhide All Curves
	Show sessions in range
	Copy Image
	Save Image As...
	Print Graph...
	Export Graph CSV...

Graph Curve Context Menu

Icon	Name
	Hide All But This
	Copy Curve Data

Icon	Name
[csv icon]	Export Curve CSV...

Help Boxes

Graph Context Menu	To show sessions related to this page or transaction, sent/received within a time range: 1.Select the time range to zoom it to a full graph 2.Click "Show sessions in range…" The sessions will be displayed in the session grid. To zoom-out one/all step, click Un-Zoom One/All. To show hidden curves, click "Unhide". Other commands: - Copy, Save, Print Graph Image - Export Graph datapoints For more options, right-click a curve. See Also: Graph Context Menu Curve Context Menu

1.5.2.2   Detail View

 Help Boxes

Page Details	The "Page Details" grid displays performance characteristics of each page from the end-user perspective. Note: Page response time includes time for loading all requests. It excludes requests loaded after the page is displayed (e.g. AJAX requests), as determined by StresStimulus. See Also: Page Details
Transaction Details	The "Transaction Details" grid displays performance characteristics of each transaction from the end-user perspective. See Also:

	Transaction Details
Request Details	The "Request Details" grid displays aggregated performance characteristics of each request grouped by URL. Time characteristics are averaged. Request counts are summed. If a request timed-out and subsequently failed, it's counted as a timeout. See Also: Request Details
Virtual User Details	The "VU Details" grid displays statistics of the test Iterations executed by every VU. See Also: VU Details
Test Case Details	The "Test Case Details" grid displays performance characteristics of each test case. See Also: Test Case Details
Test Case Group Details	The "Test Case Group Details" grid displays performance characteristics of each test case group. See Also: Test Case Group Details
Agent Details	The "Agent Details" grid displays performance characteristics of each agent. See Also: Agent Details

Context Menu

Icon	Button	Description
	Show Sessions	Show the selected sessions in the session grid
	Column Picker	Click to customize grid columns
	Auto-fit Columns	Autosize columns

	See Waterfall	Display a waterfall for this VU/ iteration
	Compare with Recorded	Compare this VU/ iteration with Recorded

1.5.2.3 VU Activity

Help Boxes

Activity Chart	- Horizontal axle is a timeline. - Vertical axle shows VUs. - Horizontal bars, represent a test iteration executed by a VU. - To zoom-in to a specific VUs/Iterations range, select an appropriate rectangular area. - To zoom-out, right-click and select Un-Zoom. For more options, right-click a horizontal bar. Other context menu commands: - Copy, Save, Print Graph Image See Also: Graph Context Menu
Activity Chart Context Menu	Horizontal bars, represent a test iteration executed by a VU. - To display a waterfall of a selected iteration, click View Waterfall. - To compare a waterfall of the selected Iteration with previously select waterfall, click Compare Waterfalls. See Also: Graph Context Menu

Iteration Bar Context Menu

Icon	Name	Description
	View Waterfall	Dbl-Click to display a waterfall for this VU/ iteration
	Compare Waterfalls	Ctrl+Dbl-Click to display this VU/ iteration in a dual waterfall on the right

Chart Context Menu

Icon	Name	Description
🔍	Un-Zoom	Click to fully Un-Zoom this chart
🖼	Copy Image	Copy Image to the clipboard
🖼	Same Image As...	Save Graph as an Image
🖨	Print Graph...	Print Graph

1.5.2.4   Iteration Waterfall

Toolbar

Icon	Description
	Enter the first VU
	Enter the first VU iteration
☑	Check to compare two waterfalls
	Enter the second VU
	Enter the second VU iteration
↻	Refresh the waterfall charts
☑	Check to enable Zoom/Scroll Synch on the left & right chart
⇄	Swap The Charts

Context Menu

Icon	Name	Description
☑	Auto-Sync	Check to enable Zoom/Scroll Synch on the left & right chart
☑	Diagonal Scrolling	Check to enable Diagonal Scrolling on this chart
	Un-Zoom	Click to fully Un-Zoom this chart
🖼	Copy Image	

Icon	Name	Description
	Save Image As...	
	Print Graph...	

Help Boxes

Waterfall View	- Select a VU and iteration. - To compare two waterfalls, check Compare and select a second VU and iteration. - Click Refresh to refresh the charts. See Also: Waterfall View Single Waterfall Chart Dual Waterfall Chart
Waterfall Chart Commands	- To swap the charts, click Swap. - To turn on/off synchronization of chart scrolling and zooming, click Sync/Un-sync. See Also: Waterfall View Single Waterfall Chart Dual Waterfall Chart

1.5.2.5   Query Log

Help Boxes

Query Test Log	To display selected replayed sessions from the Test Log in the session grid, enter selection criteria and click "Show Sessions". Selection criteria formats and examples: - for VUs, Iterations and Sessions: 1-3, 5, 9; - for responses with Errors and/or Timeouts: check 1 or 2 boxes; - to filter by time range, check the box, select Send, Received, or both, and enter the time range in seconds; - for Test Cases and Agents: Name1, Name2; Note: - leaving textboxes empty will broaden the search.

	- retrieving more than 1,000 records, as entered in the Max Sessions box, can impact performance. See Also: Querying Test Log

1.5.3   Page and Transaction Result Tab

Toolbar

Button	Action	Description
Σ	Summary	Page/Transaction summary
	Performance	Page/Transaction response time
	Latency	Page/Transaction Latency/Server time breakdown
	Failures	The number of failures on the Page/Transaction
	% Failures	The percentage of failures on the Page/Transaction
	Requests	Page/Transaction requests
	VU Activity	VU Activity Chart
	Waterfall	Waterfall Chart
	Show Sessions	Show sessions matching selection criteria
		Back to the test result

Help Boxes

Page Result Views	Click a button on the left to select one of the following page result views: Summary, Performance, Latency, Failures, Failures %, Requests, VU Activity, Waterfall. In the selected view, right-click for more options and help information. - To selected sessions from the Test Log, click "Show Sessions". - To go back to the Test Result, click Back. See Also:

	Page & Transaction Result Tabs Querying Test Log
Transaction Result Views	Click a button on the left to select one of the following page result views: Summary, Performance, Latency, Failures, Failures %, Requests, VU Activity, Waterfall. In the selected view, right-click for more options and help information. - To selected sessions from the Test Log, click "Show Sessions". - To go back to the Test Result, click Back. See Also: Page & Transaction Result Tabs Querying Test Log

1.5.3.1   Summary View

Help Boxes

Summary View	Summary view lists page or transaction basic performance metrics and failures. It includes subsections that can be expanded / collapsed by clicking the triangle icon. See Also: Summary View

1.5.3.2   Performance View

Help Boxes

Performance View	Performance view presents a page or a transaction response timeline and changes depending on the number of emulated VUs. It features five curves: the minimum, average and maximum response time, goal and the number of VUs. See Also: Performance View
Graph Context Menu	To show sessions related to this page or transaction, sent/received within a time range: 1.Select the time range to zoom it to a full graph 2.Click "Show sessions in range…" The sessions will be displayed in the session grid. To zoom-out one/all step, click Un-Zoom One/All.

	To show hidden curves, click "Unhide". Other commands: - Copy, Save, Print Graph Image - Export Graph datapoints For more options, right-click a curve. See Also: Graph Context Menu
Graph Curve Context Menu	To hide all but the selected curve, click "Hide". To unhide all curves, in the graph context menu, click "Unhide". To copy or export curve data, click Copy or Export. See Also: Graph Curve Context Menu

1.5.3.3   Latency View

Help Boxes

Latency View	Latency view presents a page or a transaction response time breakdown between Latency and Server Time. The latency (or network time) is a portion of the response time attributed to the network delays, necessary for server responses to reach the client. See Also: Latency View

1.5.3.4   Failures View

Help Boxes

Failure View	Failure views helps to analyze the number of page or transaction failures. The graph presents a timeline of errors, timeouts, missed goals and their changes depending on the number of emulated VUs. See Also:

	Failure View
Failure % View	Failure views helps to analyze the percentage of page or transaction failures. The graph presents a timeline of errors, timeouts, missed goals and their changes depending on the number of emulated VUs. See Also: Failure View

1.5.3.5   Requests View

Help Boxes

Request View	The request grid displays aggregated performance characteristics of each request related to this page or transaction and grouped by URL. Time characteristics are averaged. Request counts are summed. If a request timed-out and subsequently failed, it's counted as a timeout. See Also: Request View

1.5.3.6   VU Activity View

Activity Chart Context Menu

Icon	Name	Description
	Un-Zoom	Click to fully Un-Zoom this chart
	Copy Image	Copy Image to the clipboard
	Same Image As...	Save Graph as an Image
	Print Graph...	Print Graph

Iteration Bar Context Menu

Icon	Name	Description
	View Waterfall	Dbl-Click to display a waterfall for this VU/ iteration

Icon	Name	Description
	Compare Waterfalls	Ctrl+Dbl-Click to display this VU/ iteration in a dual waterfall on the right

Help Boxes

VU Activity View	VU Activity View shows the activity of every VU during the test. Each row in the chart represents an individual VU. The row is broken down on differently colored horizontal bars, each of which represents single test iteration. The x-axis displays the time line for the load test run. See Also: Page & Transaction Result Tabs
Activity Chart	- Horizontal axle is a timeline. - Vertical axle shows VUs. - Horizontal bars, represent a test iteration executed by a VU. - To zoom-in to a specific VUs/Iterations range, select an appropriate rectangular area. - To zoom-out, right-click and select Un-Zoom. For more options, right-click a horizontal bar. Other context menu commands: - Copy, Save, Print Graph Image See Also: Graph Context Menu
Activity Chart Context Menu	Horizontal bars, represent a test iteration executed by a VU. - To display a waterfall of a selected iteration, click View Waterfall. - To compare a waterfall of the selected Iteration with previously select waterfall, click Compare Waterfalls. See Also: Graph Context Menu

1.5.3.7   Waterfall View

Toolbar

Icon	Description
	Enter the first VU
	Enter the first VU iteration
☑	Check to compare two waterfalls
	Enter the second VU
	Enter the second VU iteration
🔄	Refresh the waterfall charts
⇄	Swap The Charts
☑	Check to enable Zoom/Scroll Synch on the left & right chart
←	Navigate to VU Activity chart

Context Menu

Icon	Name	Description
☑	Auto-Sync	Check to enable Zoom/Scroll Synch on the left & right chart
☑	Diagonal Scrolling	Check to enable Diagonal Scrolling on this chart
	Un-Zoom	Click to fully Un-Zoom this chart
🖼	Copy Image	
🖼	Save Image As...	
🖨	Print Graph...	
✔	Compare with Recorded	Compare all session replayed by this VU in this iteration with the recorded sessions

Help Boxes

Waterfall View	- Select a VU and iteration. - To compare two waterfalls, check Compare and select a second VU and iteration. - Click Refresh to refresh the charts. See Also: Waterfall View Single Waterfall Chart Dual Waterfall Chart
Waterfall Chart Commands	- To swap the charts, click Swap. - To turn on/off synchronization of chart scrolling and zooming, click Sync/Un-sync. See Also: Waterfall View Single Waterfall Chart Dual Waterfall Chart

1.5.4   Comparing-Tests

Help Boxes

Compare multiple tests	Click a button on the left to select Summary or KPI Graph view. In the selected view, right-click for more options and help information. See Also: Test Comparison Summary View KPI Graph Comparison View

Toolbar

Button	Action	Description
Σ	Summary	Test Comparison Summary
〽	KPI Graph	KPI Graph Comparison

1.6   Workflow Tree Toolbar

Toolbar

	Back - Return one step back
	Show Test Case Tree on the left pane
	Show captured sessions on the left pane
	Show Test Case sessions on the left pane
	Test Wizard
	Run - Start a load test

Help Boxes

Workflow Tree Toolbar	- Click "Back" to go back one step on the Workflow Tree. - Click "Tree View" to display the Test Case Tree on the left pane. - Click "Grid View" to display the session Grid on the left pane. - Click "Show Recorded" to display Test Case sessions in the session grid.
Test Wizard / Run Test	- Click "Test Wizard". The wizard will guide you through the major steps of creating, configuring and running a test. - Click "Run" to start the test. Graphs will display the test results in progress. After the test completion, select reports from the Analyze Results section in the Workflow Tree. See Also: Starting Test

1.7   Test Wizard

1.7.1   Record Test Case

1.7.2   Configure Test Case

1.7.3   Configure Test

1.7.4   Run Test

1.7.5   Analyze Results

1.7.6   Record Test Case

Help Boxes

Create a Test Case	To record a Test Case by navigating through your application, select the recording source and click "Record". See Also: Recording a test case
Browser Recording Settings	- Enter the initial URL and select a browser cache option. - In Private Mode (recommended), browser cache is not used. - Enter the first transaction name (optional) and click Record See Also: Recording with Web Browser

1.7.7   Configure Test Case

1.7.7.1   Targeted Hosts

Icon	Description
	Delete the requests to the selected hosts
	Add the selected hosts to the Excluded Hosts list and delete requests to these hosts

Icon	Description
	Show the Excluded Hosts list
	Select All
	Delete the sessions with the selected content types

Test Case Hosts	This list displays hosts targeted in this Test Case.
	Toolbars commands: - Delete requests to the selected hosts from the Test Case.
	- Add the selected hosts to the Excluded Hosts list. Requests to these hosts will be ignored in future recordings.
	- Show the Excluded Hosts list.
	See Also: Purging requests to unwanted hosts

1.7.7.2 Content-Types

Icon	Description
	Delete the sessions with the selected content types
	Add the selected content types to the Excluded Content Types list and delete sessions with these content types
	Show the Excluded Content Types list
	Select All
	Delete the sessions with the selected content types

Test Case Content Types	This list displays content types used in this Test Case.
	Toolbars commands: - Delete sessions with the selected content types from the Test Case.
	- Add the selected content types to the Excluded Content Types list. Sessions with these content types will be ignored in future recordings.
	- Show the Excluded Content Types list. See Also: Purging sessions with the unwanted content types

1.7.7.3   Autocorrelation

AutoCorrelation	Autocorrelation is the automatic modification of requests issued during a test run to replace recorded values with corresponding dynamic values received from the server in the previous responses. Autocorrelation is necessary to preserve application integrity in dynamic websites and avoid server errors. The wizard will now find and configure hidden autocorrelation parameters. See Also: AutoCorrelation

1.7.8   Configure Test

Help Boxes

Load Pattern	Load pattern defines dynamics of virtual users (VU) throughout the test. See Also: Load Pattern
Test Duration	Set the test completion criteria. After reaching this condition, the test will stop. See Also: Test Duration

1.7.9   Run Test

Help Boxes

Run Test	The wizard will now start the test execution. For more information, see Running and Monitoring Test

1.7.10   Analyze Results

Help Boxes

Analyze Results	The wizard will now navigate through the main test results. For more information, see Analyzing Results

2   OTHER ELEMENTS

2.1   Session Grid

<u>Help Boxes</u>

Fiddler Grid	To view test sessions in the Fiddler Grid, click the arrow on the "Show …" split-button on the toolbar above Workflow Tree and select which sessions to show.
	1. "VU number" column displays a VU in the <User XXX> format.
	2. Iterations and requests are displayed in the column "Iter-URL" as < YYY-ZZZ>, where YYY is an iteration number for the user XXX, and ZZZ is a request number within the iteration.
	3. Replayed Sessions: Primary requests are displayed in bold-gray. Dependent requests are displayed in gray.
	4. To delete selected recorded sessions from a test case, hit (Ctrl+Del).
	5. Response bodies are removed to save memory. To keep them, configure "Purge response bodies" property in the Result Storage section.

<u>Session Grid</u>

#	Request number
Results	Response code

Method	HTTP request method, i.e. GET, PUT
Host	Host name
URL	Path of the resource
Content-Type	The MIME type of the response
Request	Request size
Response	Response size
TTFB	Time to receive the first byte of the response
TTLB	Time to receive the response
Virtual User	Virtual user issued the request
Iter-URL	Iterations and request number
Comment	Comment

2.2   Main Menu

2.2.1   Standalone Version

2.2.1.1   File

Menu Options

Button	Action	Description
🗁	Open Test	
💾	Save Test	
	Save Test As	
	Close Test	
	Recent Tests	Allows to re-open 10 last saved tests

	Exit	

2.2.1.2   Options

Hosts/Content-types

Help Boxes

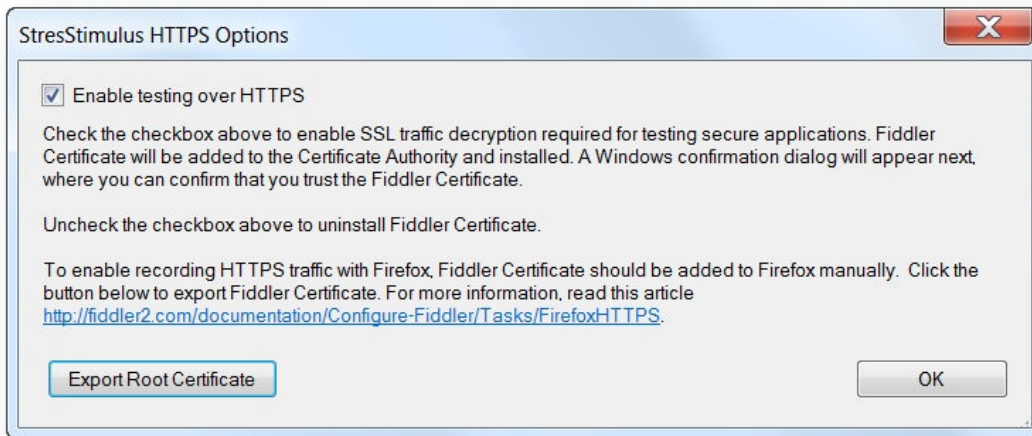| Host Remapping	Host remapping allows recorded requests, sent to an original host, to retarget to a new host and/or new port To enable host remapping: - make sure that the "Enable Host Remapping" check box is checked.; - on every line, enter a new host and the original host, separated by at least one whitespace character.; - optionally add the new port and the original port to the host. - click "Save" button. Use hostnames or IP addresses. For example: 111.222.33.44 originalhost.com # host remapping newhost.com 555.666.77.88:8888 #host and port remapping myhost.com:8888 myhost.com:1234 #port remapping See Also: Host and Port Remapping
Change HTTP/HTTPS scheme	Use this feature if you recorded a test case against a non-secure host and need to replay it against a secure host or vice versa. On every line, enter a target domain for which the recorded scheme should be changed from HTTP to HTTPS or from HTTPS to HTTP. See Also: Change URI scheme (HTTP/HTTPS)
Excluded Hosts List	The Excluded Hosts List includes hosts that will be excluded from the performance testing. Requests to these hosts will be ignored in future recordings. You can edit this list. See Also: Purging requests to unwanted hosts
Clear Cache Domain List	Clear Cache Domain List includes domains, which resources will

	be cleared from the browser cache before recording test cases. It is recommended to clear browser cache before recording a test case. Clear Cache Domain List is used for automatic cache clearing. You can edit this list. See Also: Automatic browser cache clearing
Excluded Content Types List	Sessions with the content types in the Excluded Content Types list will be ignored in future recordings. You can edit this list. See Also: Purging sessions with unwanted content types

HTTPS

<u>Enabling HTTPS</u>

Checkbox	Enable testing over HTTPS
Message	Check the checkbox above to enable SSL traffic decryption required for testing secure applications. Fiddler Certificate will be added to the Certificate Authority and installed. A Windows confirmation dialog will appear next, where you can confirm that you trust the Fiddler Certificate. Un-check the checkbox above to uninstall Fiddler Certificate. To enable recording HTTPS traffic with Firefox. Fiddler Certificate should be added to Firefox manually. Click the button below to export Fiddler Certificate. For more information, read this article http://docs.telerik.com/fiddler/configure-fiddler/tasks/firefoxhttps
Button	Export Root Certificate

Options

StresStimulus Listening Port:	49386
Check for updates on startup.	checkbox

Agent Options

Help Boxes

| Agent Mode | The Agent mode allows the local machine to replay test cases under the management of a controller.

Agent can run as a Fiddler add-on or as a Windows service. |
|---|---|

	After enabling the Agent mode, the local machine would be able to generate load in distributed tests.	
	To use StresStimulus interactively on this machine, disable the Agent mode.	
	See Also: Controller and Agents	

2.2.1.3   Help

Toolbar

1st Level	2nd Level	Action
		Check For Updates
		Support Options
		Email Support
		Support Forum
		Inspect My Test
		Online Help
		Show Hidden Dialogs
		License
		About
		Free Edition

Help Boxes

Serial number	Deactivate the serial number before activating it on a different machine.
	Activation/deactivation requires Internet connection and Stimulus Technology auto-verification.

License

<u>Help Boxes</u>

Activation / Deactivation	- To activate your license, enter your serial number and click "Activate". - For floating licenses, also enter the number of VUs you wish to allocate to this machine. - Deactivate the serial number before activating it on a different machine. - Activation/deactivation requires Internet connection and Stimulus Technology auto-verification. Note: Deactivation will not work if you requested an off-line license.
Automatic Deactivation	If checked, StresStimulus will automatically: - deactivate the serial number upon exit; - activate the serial number upon start. Check this box only if: - this is a virtual machine that may be terminated before you deactivate the serial. OR -the serial number is moved between this and other machine(s) frequently.

2.2.2   Add-on (Integrated) Version

<u>Menu Options</u>

Menu Item	Sub-menu Item	Description
📂 Open Test		
💾 Save Test		
Save Test As		
Close Test		
Recent Tests		
Hosts/Content-	Remap Hosts	

types		
	Change Scheme	
	Excluded Hosts	
	Clear Cache Domains	
	Excluded Content-Types.	
⚙ Options		
🖼 Agent Options		
⬇ Check for Updates		
❓ Support Options		
	✉ Email Support	
	👥 Support Forum	
	⬆ Inspect My Test	
	💿 Online Help	
Show Hidden Dialogs		Some of the dialogs, which display information helpful to new users, may have a **Do not show again** check-box. Check this box is for preventing such dialogs from being displayed in the future. Use this menu option to revert such action and start displaying all hidden dialogs again.
License		
About		
Free Edition		

2.2.2.1   Hosts/Content-types

2.2.2.2   Options

2.2.2.3   Agent Options

2.2.2.4   Support Options

2.2.2.5   License

2.2.2.6   Hosts/Content-types

Remap Hosts

Change Scheme

Excluded Hosts

Clear Cache Domains

Excluded Content-types

Remap Hosts

Help Boxes

Host Remapping	Host remapping allows recorded requests, sent to an original host, to retarget to a new host and/or new port
	To enable host remapping: - make sure that the "Enable Host Remapping" check box is checked.; - on every line, enter a new host and the original host, separated by at least one whitespace character.; - optionally add the new port and the original port to the host. - click "Save" button.
	Use hostnames or IP addresses. For example: 111.222.33.44 originalhost.com # host remapping newhost.com 555.666.77.88:8888 #host and port remapping myhost.com:8888 myhost.com:1234 #port remapping
	See Also: Host and Port Remapping

Change Scheme

Help Boxes

Change HTTP/HTTPS scheme	Use this feature if you recorded a test case against a non-secure host and need to replay it against a secure host or vice versa.
	On every line, enter a target domain for which the recorded scheme should be changed from HTTP to HTTPS or from HTTPS to HTTP.
	See Also: Change URI scheme (HTTP/HTTPS)

Excluded Hosts

Help Boxes

Excluded Hosts List	Requests to the hosts in the Excluded Hosts list will be ignored in future recordings.
	You can edit this list. Wildcards in the host names are supported.
	See Also: Purging requests to unwanted hosts

Clear Cache Domains

Help Boxes

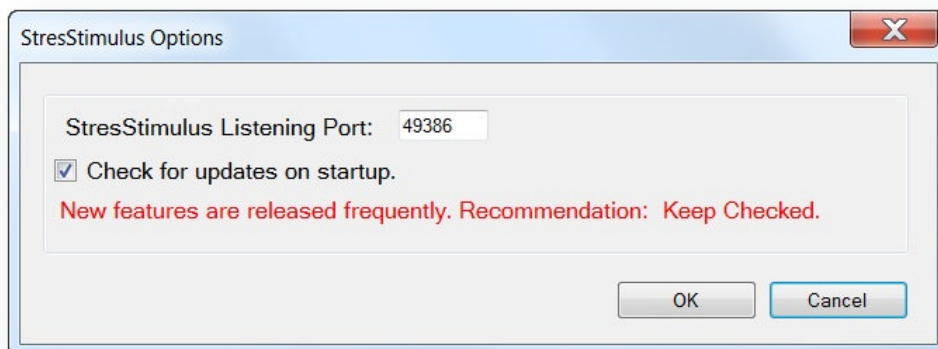| Clear Cache Domain List	Clear Cache Domain List includes domains, which resources will be cleared from the browser cache before recording test cases.
	It is recommended to clear browser cache before recording a test case. Clear Cache Domain List is used for automatic cache clearing.
	You can edit this list.
	See Also: Automatic browser cache clearing

Excluded Content-types

Help Boxes

Excluded Content Types List	Sessions with the content types in the Excluded Content Types list will be ignored in future recordings. You can edit this list. Wildcards in the content types are supported. See Also: Purging sessions with unwanted content types

2.2.2.7   Options

StresStimulus Listening Port:	49386
Check for updates on startup.	checkbox

2.2.2.8   Agent Options

Help Boxes

Agent Mode	The Agent mode allows the local machine to replay test cases under the management of a controller. Agent can run as a Fiddler add-on or as a Windows service. After enabling the Agent mode, the local machine would be able to generate load in distributed tests. To use StresStimulus interactively on this machine, disable the Agent mode.

	See Also: Controller and Agents

2.2.2.9   Support Options

<u>Help Boxes</u>

Inspect My Test Options	The following test components will be uploaded to Stimulus Technology's secure support repository: -Test Cases (required) - upload a test configuration file (.ssconfig) and recorded test case session files (.saz). - Opened Result (optional) - upload an SQL server CE file (.sdf) with the test log of a loaded test run. Only a result opened in the leftmost result tab will be uploaded.

2.2.2.10   License

<u>Help Boxes</u>

Activation / Deactivation	- To activate your license, enter your serial number and click "Activate". - For floating licenses, also enter the number of VUs you wish to allocate to this machine. - Deactivate the serial number before activating it on a different machine. - Activation/deactivation requires Internet connection and Stimulus Technology auto-verification. Note: Deactivation will not work if you requested an off-line license.
Automatic Deactivation	If checked, StresStimulus will automatically: - deactivate the serial number upon exit; - activate the serial number upon start. Check this box only if: - this is a virtual machine that may be terminated before you deactivate the serial. OR -the serial number is moved between this and other machine(s) frequently.