SOASTA CloudTest™ Release Notes Build 6806.29

Nov 25, 2013

Table of Contents

Build 6806.29 1
New Features 1
CloudTest 1
New CloudTest Style for Popups, Dialog Boxes, and Wizards 1
Faster load time for Central screens 3
Faster load time for Clip Editor and no virtualized scrolling 3
Pause/Resume HTTP Recording in the Clip Editor 3
Add host name to Exclude list when removing an HTTP target 4
Support for Stored Procedures/Functions 5
Duration Timespan Filter 6
Series Filtering 8
mPulse 10
Time Windows 10
Defining a Time Window using the Filter Toolbar 12
Defining a Dashboard Time Window using the Edit Panel 13
Percentile Filter Attribute 15
Enhancements 16
CloudTest 16
Stopping a Script or ISSE 16
Clip, Track, or Band Doesn't Get Focus in Results Details Dashboard 16
Better error message when there are too many components in the Results Details 16
Pending timeout should be ignored for Cloud Providers that don't support early termination 16
Database Monitoring Improvements 17
Setting Up Monitoring Server Groups and Monitors for Databases 17

New Database Action XML and JSON Format Outputs for Supporting Multiple Results 20
Stored Procedures in the Result Details Dashboard 21
New Database Monitoring Widgets 23
Track Filtering Improvements 26
Error Analysis for App Actions and Browser Actions 27
App Actions in the Error Analysis Widget 27
Browser Actions in the Error Analysis Widget 28
mPulse 29
Defining a Dashboard Percentile using the Edit Panel 29
New 'All' default option in A/B Test filter 30
Allow CSV exporting of data from the Geography widget. 32
Other Analytic Changes in This Release 32
TouchTest Web User-Agent Setting (iOS Only) 33
Bugs Fixed 35
CloudTest Bugs Fixed 35
TouchTest Bugs Fixed 39
mPulse Bugs Fixed 41

Copyright 2012. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Build 6806.29

New Features

This release includes the following major new features.

CloudTest

New CloudTest Style for Popups, Dialog Boxes, and Wizards

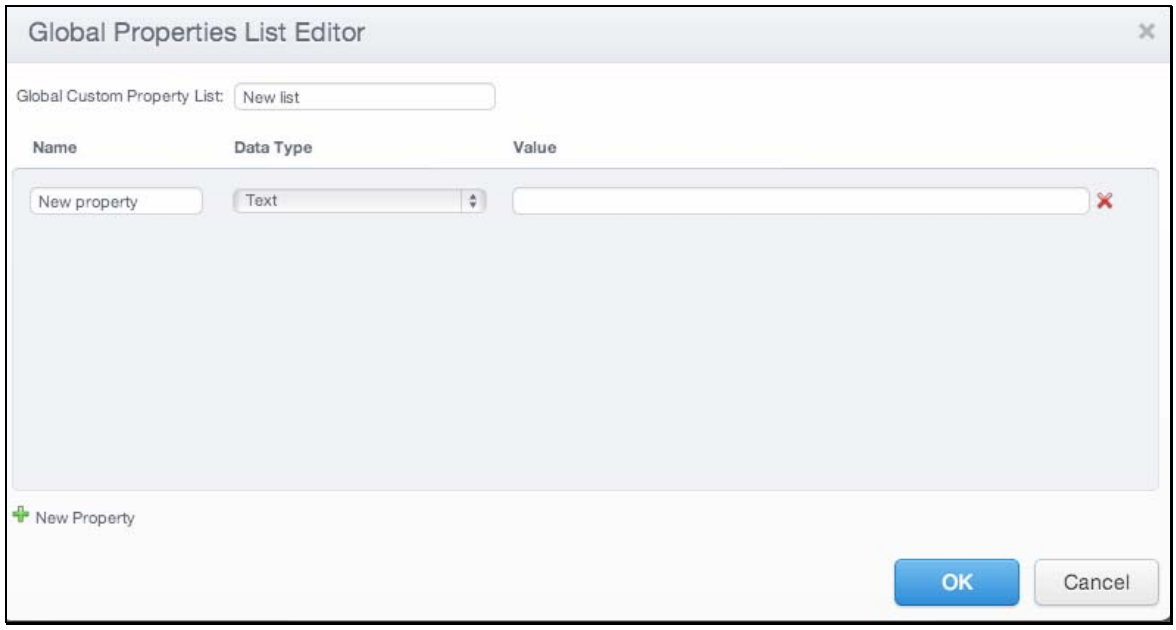
This release introduces (or concludes) some subtle changes that have been going on in CloudTest for the last several releases. Users may've noted slight improvements to the look-and-feel of dialog boxes, popups, forms, buttons, tabs, and wizards—changes involving new fonts, color scheme, layout, and button/tab colors .

Changes in this release are notable for completing this new look-and-feel for all SOASTA popups, modal dialogs, dialog boxes, and wizards (including the five full-page wizards—Grid Manager, Seed Data, Test Environment Editor, Results Service Editor, and Dashboard Wizard). The changes are also found in the lower panel forms such as those found in the Clip Editor lower panel tabs for message or action properties.

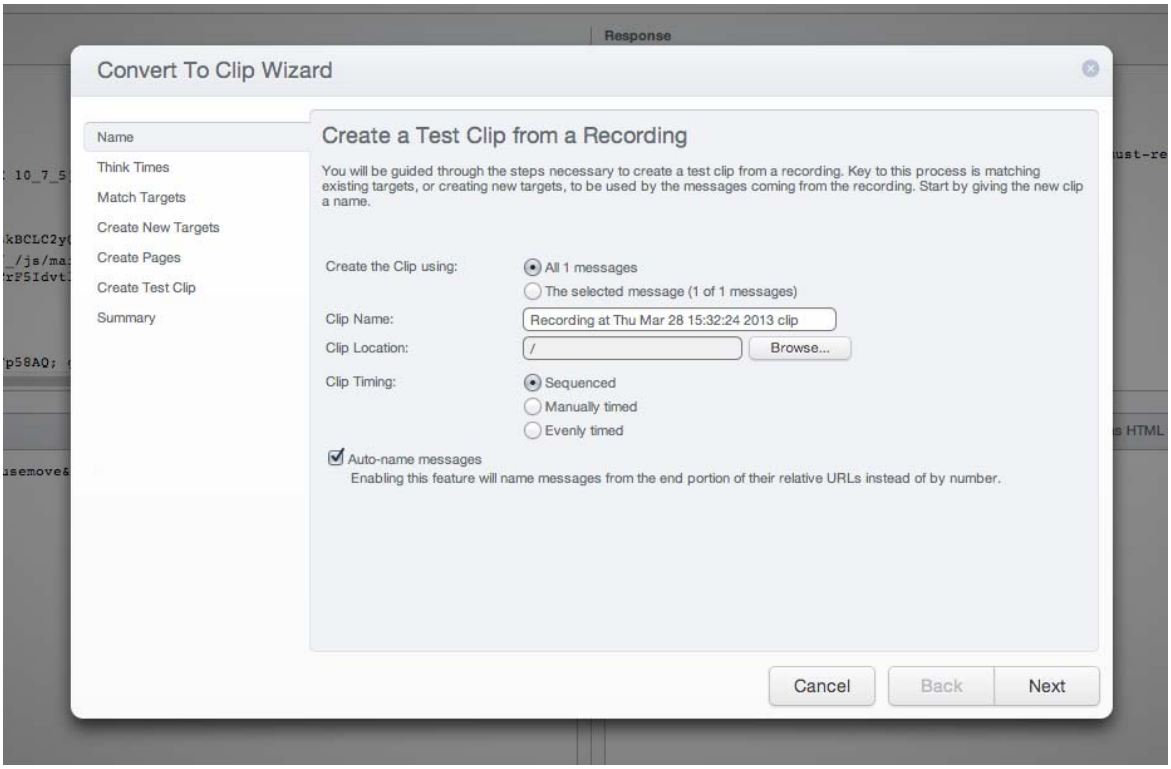
The new style is a muted, two-tone gray with an offset blue color to highlight suggested user actions. Inactive fields are easier to distinguish from active ones.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Dialog Boxes –Dialog boxes have the new style (as shown in the updated Global Properties List Editor box below). Alert and modal popups also use it.



Wizards – Wizards also display the new style.



Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Faster load time for Central screens

This release includes significant performance improvements in loading Central screens, including in Central lists with numerous items.

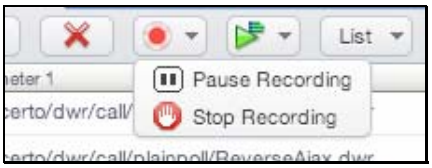
Faster load time for Clip Editor and no virtualized scrolling

This release includes specific, significant improvements to Clip Editor load time and the elimination of virtualized scrolling.

Pause/Resume HTTP Recording in the Clip Editor

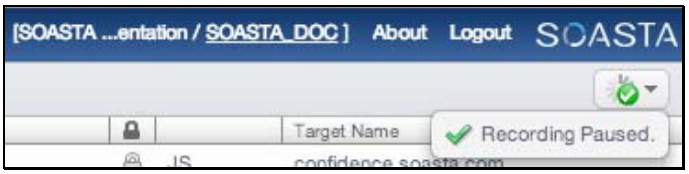
This release introduces Pause and Resume commands to the Clip Editor, Recording menu. Clip Editor sessions can be paused and resumed according to need. While the Clip Editor is in Record mode, two new commands will appear on the Record menu.

- **Pause Recording** – If a recording session is in progress, the user can choose this command to suspend recording.



A Clip Editor HTTP recording session lasts until Stop Recording is chosen from the menu. When Pause Recording is chosen, the recording session will be suspended until resumed or stopped.

While recording is paused, the Clip Editor's Status Indicator (top right) confirms this status.



- **Resume Recording** – If recording is paused, the user can choose this command to restart the recording session.

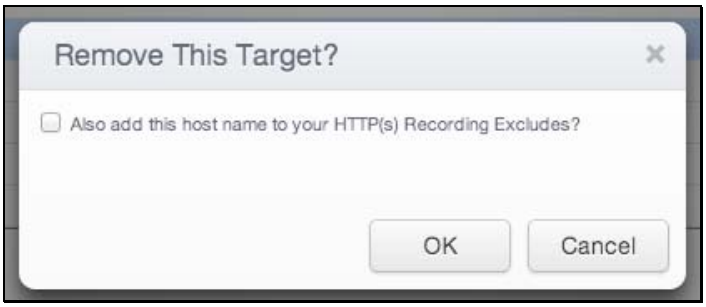
Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Add host name to Exclude list when removing an HTTP target

As of the SOASTA 47 release, users have had the ability to define host name excludes in HTTP clips via the Clip Editor, Etc. (…) menu's Edit HTTP(s) Recording Excludes… command. As of this release, whenever an HTTP(S) target is removed from a test clip, a prompt will appear to confirm this removal.

The Remove This Target prompt box also includes a checkbox giving the user an opportunity to add the host name to this excludes list.

1. Right-click the target in the Included Targets list, and then choose Remove Target from the context menu.



2. In the Remove This Target? box that appears, check the box to add this host name to the set of excludes for this clip.
3. Click OK to remove the target from the clip or Cancel to abandon target removal.

Excludes added using this method are appended to the existing clip excludes, which can be reviewed in the Edit HTTP(s) Recording Excludes.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Support for Stored Procedures/Functions

This release introduces support for stored procedures/functions for both PostgreSQL and SQL Server (Oracle support will be introduced in a later release).

A database action (in a clip element) may contain one or multiple SQL statements and/or stored procedure/function calls. Since only one output option can be specified per database action, the same output option will apply for all the SQL statements and/or stored procedures/functions for the same database action.

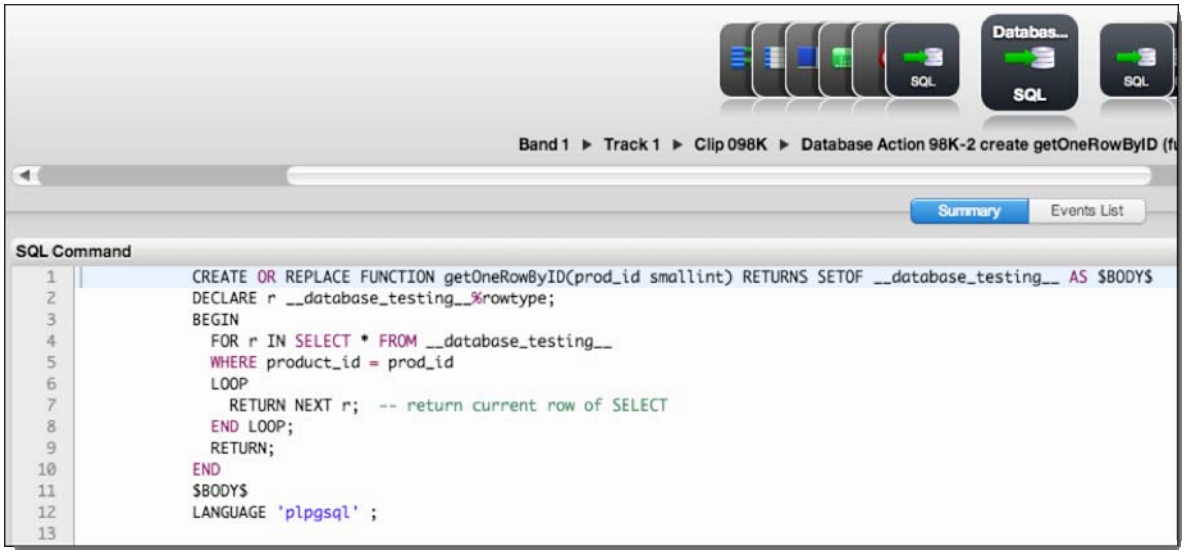
Note that the output options for CSV, JSON, and XML formats apply to queries only. When one of those output options is specified for a database action that contains both queries and non-queries, the output option of Summary will be used for the non-query statement(s).

For example, for a database action that contains two SQL statements: INSERT and SELECT. If the output option is set to “xml-with-summary” (which is for queries), the output format for the INSERT statement will be “summary” (and the output format “xml-with-summary” will be used for the SELECT statement).

Note also that the output options for CSV formats cannot be used for multiple SQL statements and/or stored procedure/function calls because the columns in the results can be different.

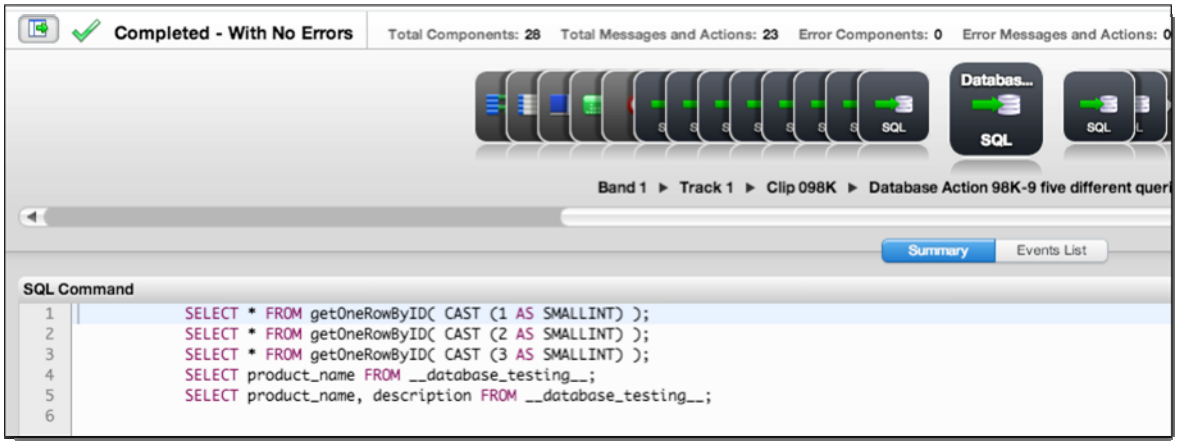
A stored procedure can contain one or multiple SQL statements. If it contains one SQL statement, the result format is same as current.

In the following screenshot, a stored procedure for PostgreSQL is shown.



Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

In the following screenshot, the database action shown consists of three stored procedure calls and two queries. There are five results respectively.



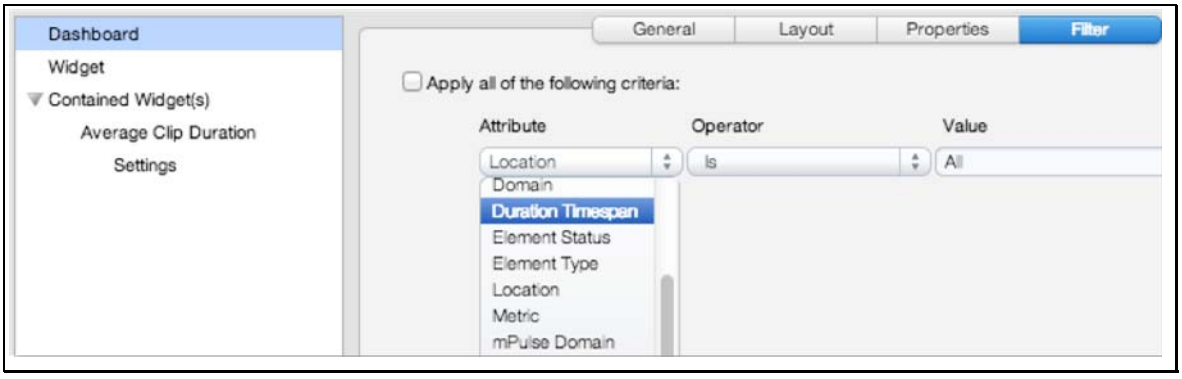
Duration Timespan Filter

The addition of a Duration Timespan filter for dashboards and widgets allows users to track both full and effective duration for all containers

The Duration Timespan filter appears on the dashboard edit panel's Filter tab, Attribute drop down for dashboards that use duration widgets and for the duration widgets themselves. This filter can be added to a dashboard or widget, but effective duration data can only be displayed for tests that were run after the introduction of this feature.

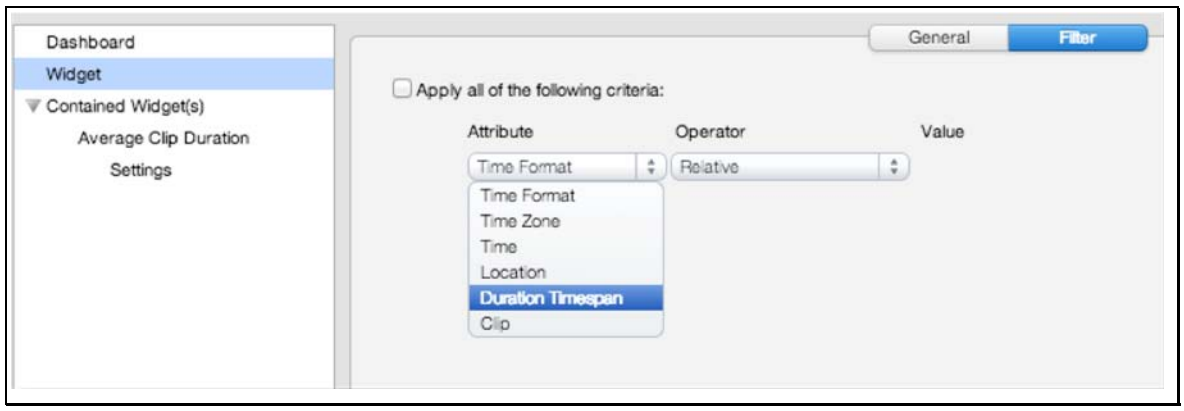
When Duration Timespan is used, the underlying Maestro server will provide a number that includes only transport times for each container type.

If no Duration Timespan filter exists then the default behavior is to show effective duration for tests created after the introduction of this feature and full durations for tests run prior to this.

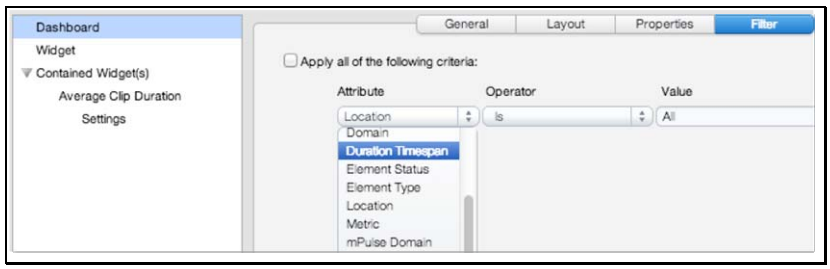


At the widget level, the Duration Timespan filter appears only for duration widgets.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.



Duration widgets are found in the Widget Type Selection Panel's Widget Types, Charts, Durations category.



The possible operator values for Duration Timespan are: "Effective" and "Full."

Effective – Effective duration includes only that time it took to execute resources from point A to point B in time. This measure is the overall amount of time doing “real work” as opposed to the “overhead” created by ancillary tasks (i.e. time spent doing validations, scripts, IF statements, etc.).

Users should note that parallel tasks (such as in the resources section of a page) are not counted separately.

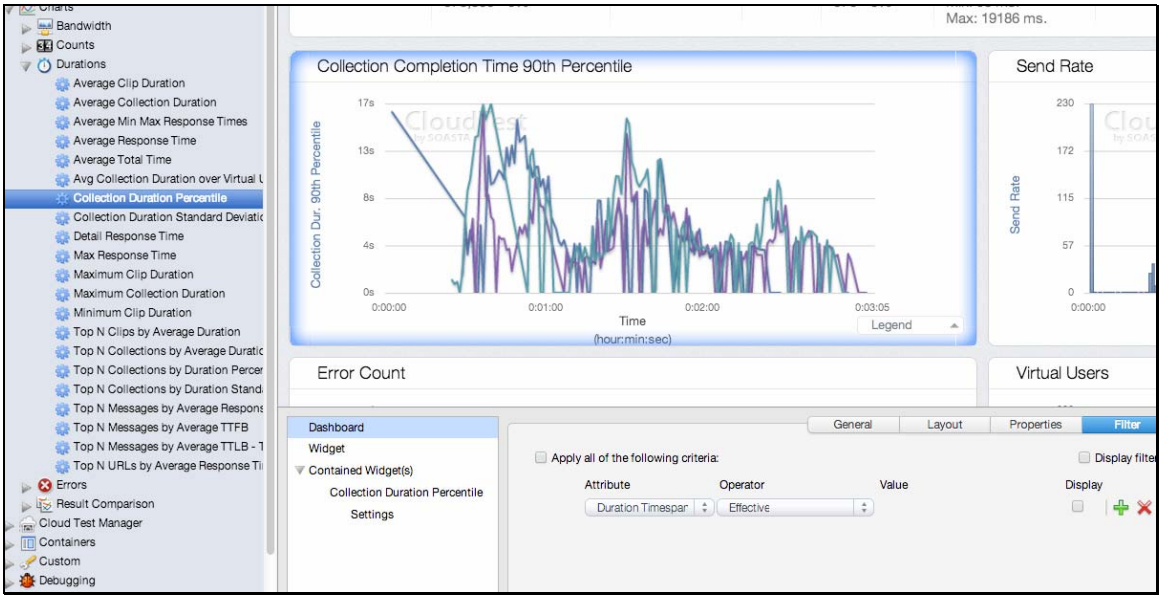
For example, if a Page had two resources, which were sent in parallel, and one took 10 seconds to send and receive whiled the other took 15 seconds, the “effective duration” of the resources section of that page is 15, and not 25.

Note: Delay times are an exception to the general rule about calculating effective duration. They are included in this measure.

Full – The full amount of time including the overhead of ancillary tasks for the given container from beginning to end.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

In the screenshot below, effective duration is applied at the dashboard level.

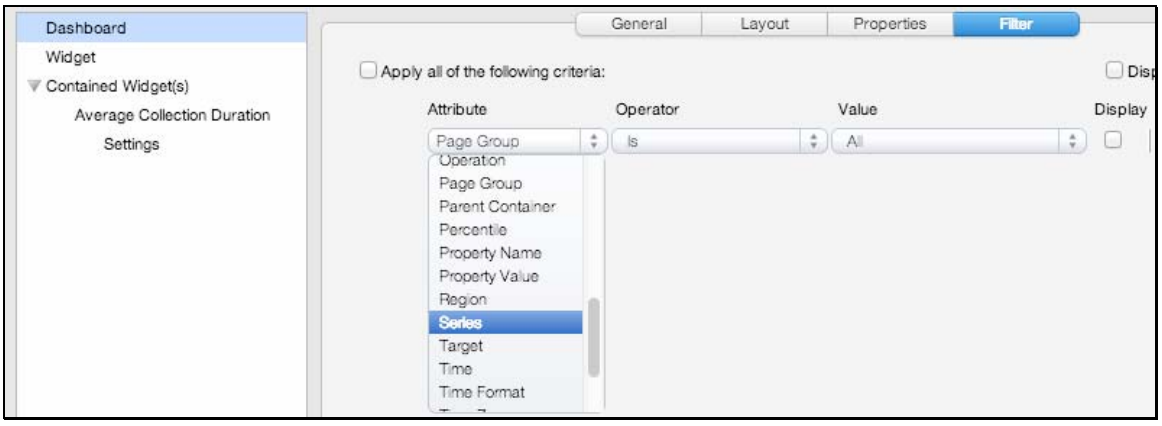


If the Duration Timespan, Effective Duration value is set on a dashboard or widget, and the displayed result does not have this data, then the dashboard will show "empty" (or, if it's a chart, "No Data", and, if it's a cell in an Analysis widget, then the same dash shown "-" for other non-applicable fields will be shown).

Series Filtering

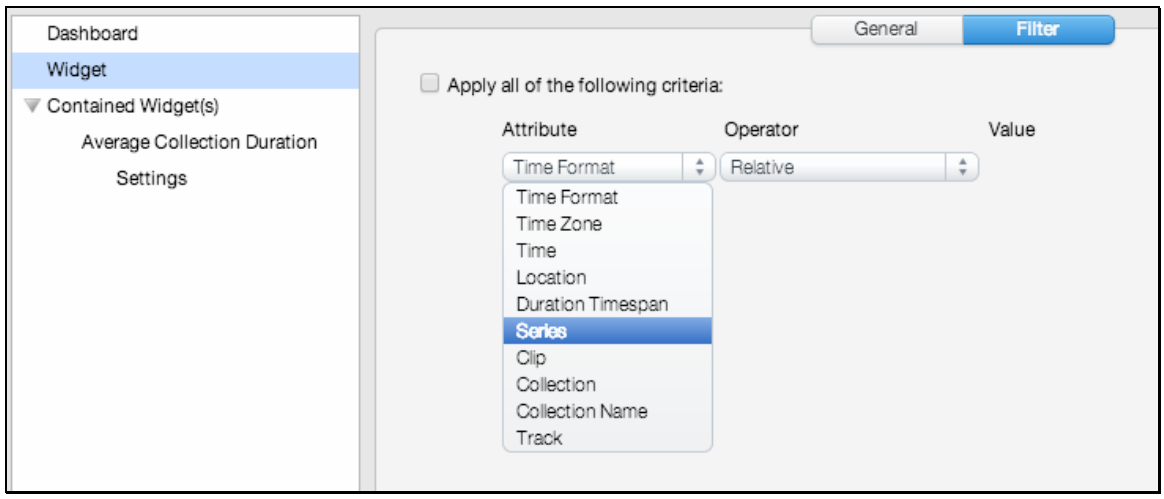
This release introduces a new Series filter that allows users to filter the various series in a result at both the dashboard level, and where applicable, at the widget level.

The Series filter appears in all dashboards. Series filtering will only impact those charts that support it.



The Series filter also appears in all charts that present comparative information in series form.

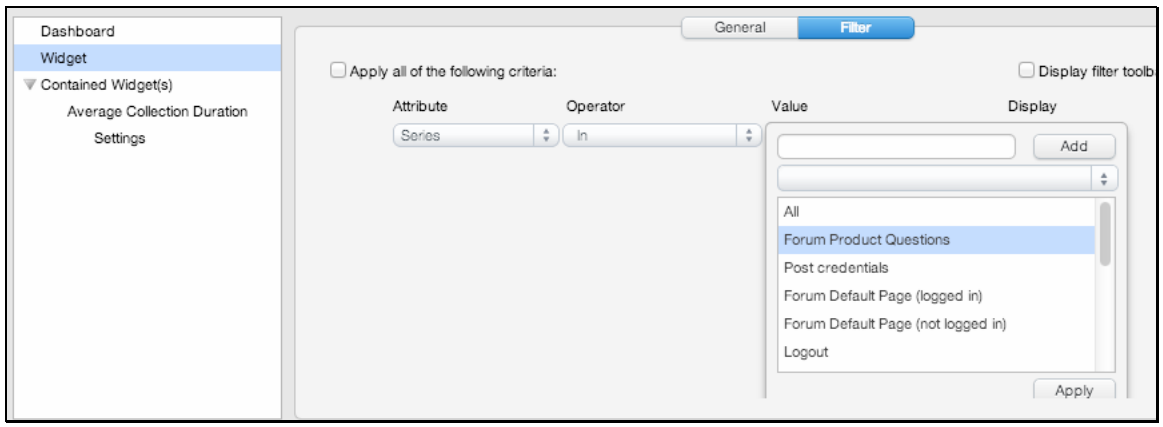
Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.



A chart series is one category of data presented in a chart as points on a timeline.

Note: The Value field for the Series filter will display series by the order of the number of the points in that series--with the series with the most points showing up first.

For example, in the shot below, note that the possible values to filter by are listed by the order of the number of points in the given series.



Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

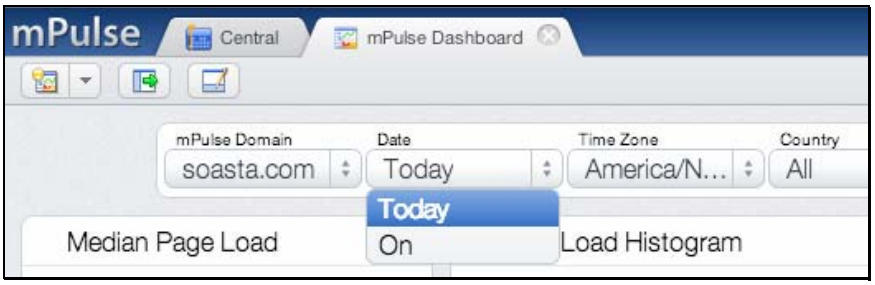
mPulse

Time Windows

mPulse now includes additional Date filters that can be used to define time windows between specified dates, as well as other menu-driven time windows such as Last 24 Hours, Last Hour, This Week, and This Month. A time window is a time bound or a time range window, in this case one that is specified as between two dates in time.

In the prior release, the Date filter had limited options:

- Today (the current day) and,
- On (if selected, the Calendar would appear to set the filter-by date.

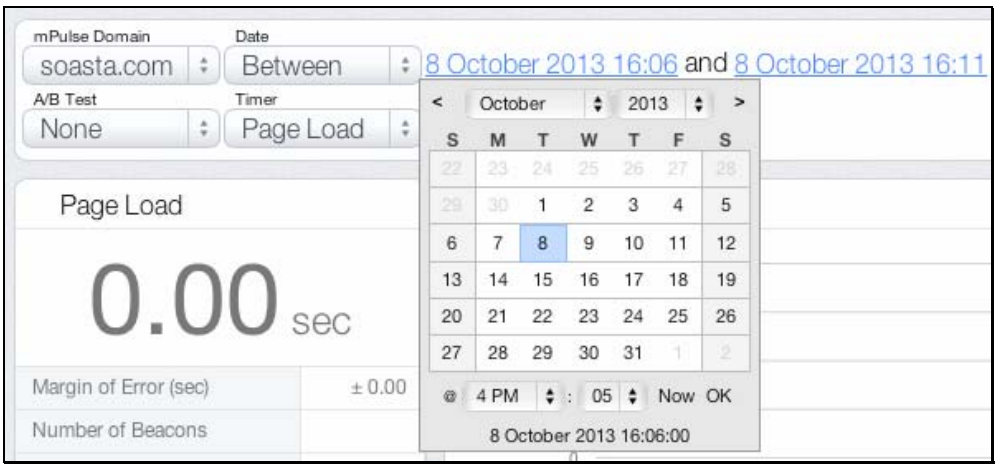


As of SOASTA 48, Today is still the default Date filter and a specific date can still be set using "On" with the specified calendar date. However, all of the following new "moving time window" settings are also available:

- Last 24 Hours – Filter by the prior 24 hour time window
- Last hour – Filter by the prior hour time window
- This week – Filter by the current calendar week that is underway
- This month – Filter by the current calendar month that is underway
- On – Filter is set to the specified calendar date
- Between – Filter by the defined time window

Additionally, the Calendar drop-down, Date settings can now be used to filter the window between two dates (in addition to On a specific calendar date).

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.



Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Defining a Time Window using the Filter Toolbar

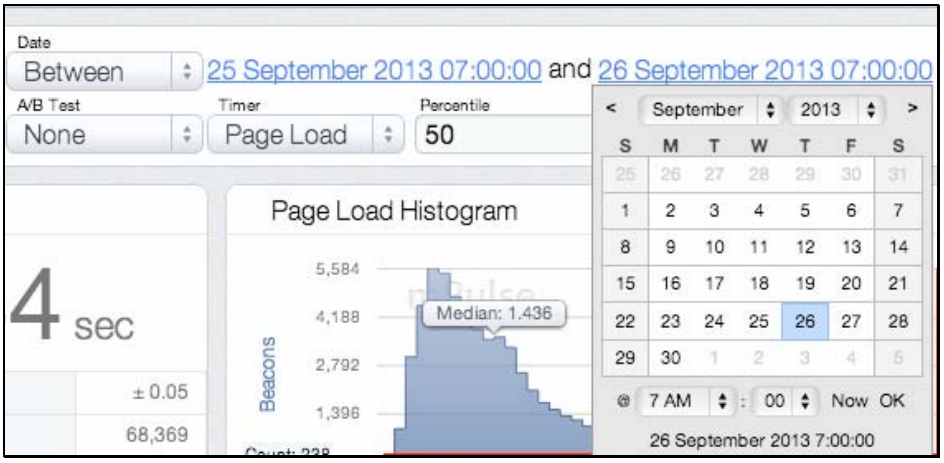
This release offers precise time window settings to within five-minute increments (e.g. Thursday 1:05 AM to Friday 2:05 PM). Such time windows are useful for isolating issues that happen right after a rollout, or major event in an application life cycle. Use the following steps to define a time window by date, and also, to the hour.

TIP: If you are using the mPulse Dashboard, you can already define a time window by using the Date drop-down, and selecting Between. If you'd like to change the defaults using the Edit Panel, you can do so in any custom dashboard. An mPulse prompt will appear if the current dashboard needs to be cloned. In such cases, you can make the cloned dashboard your default one via the Edit Panel, Dashboard, General tab's Set as my Default Dashboard button.

1. Using the default Filter toolbar, select Date, and then select Between from the drop-down.

When you do so, two date/time combos appear on the filter toolbar. Use these to define the starting point and ending point of the time window.

2. Set the ending point for this time window first by clicking the second date and then using the second Calendar.
3. Optionally, also define the time (e.g. to the hour or minute using the time spinners).



The time window is between two points in time.

4. Optionally, also define an hour in the day. Use the spinners on the time to set to the minute filtering in your time window.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

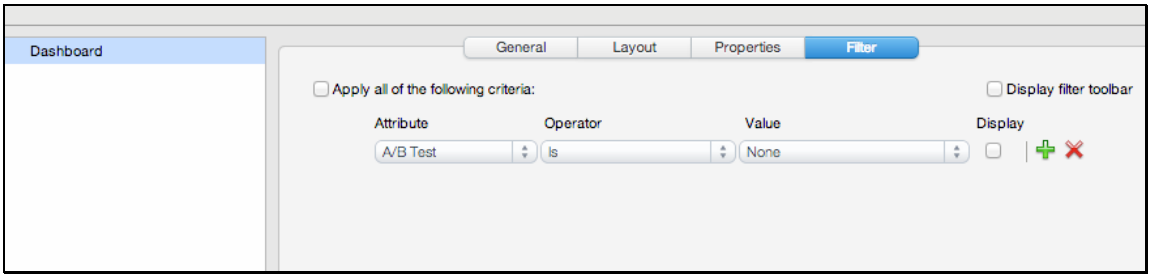
Note: If no hour is specified then note that the range includes the entire day (e.g. until the next day begins).

5. Set the starting point for this time window by clicking the first date and then using the first Calendar.
6. Optionally, also define the time (e.g. to the hour or minute using the time spinners).

Defining a Dashboard Time Window using the Edit Panel

If the dashboard is new and wasn't cloned from an existing system dashboard, you'll need to add the necessary filters using the following steps.

1. Open the dashboard and Toggle Dashboard Edit Mode to show the lower panel. The panel opens with the Dashboard node selected.
2. Click the Filter tab. Note that the dashboard below has one generic filter with *None* as its value. If your custom dashboard was based on an existing system dashboard it may have many more filters already set than are shown below.

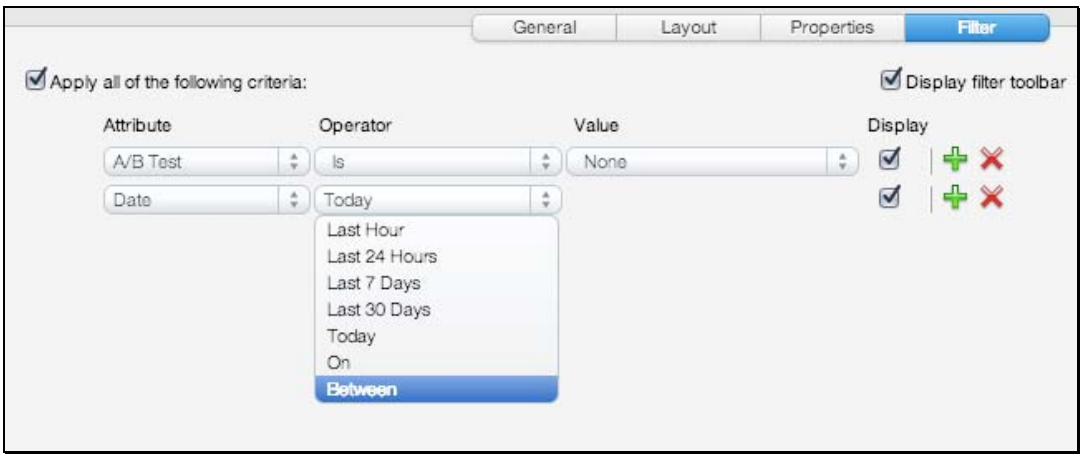


TIP: Always check "Display filter toolbar" if you'd like to be able to change filter values on the dashboard without opening this panel.

3. Either click the Attribute drop-down to change the default to Date, or click the green Plus (+) icon and then set the new row to Date.

   If you're defining a multi-attribute dashboard filter, add the other attributes in the order you'd like them to display, ensuring that Date is defined in one row.
4. Set the given row to the Attribute, Date.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.



5. Set the operator to *Between* to filter the dashboard by that value now, or, if you intend to display the filter toolbar, set it to any value and set it at runtime.
6. Set the ending point for this time window.
7. Optionally, also define an hour in the day.
8. Set the starting point for this time window.
9. Optionally, also define an hour in the day.
10. Click Apply and then OK to exit the Edit Panel.

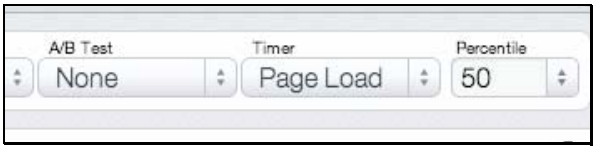
Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Percentile Filter Attribute

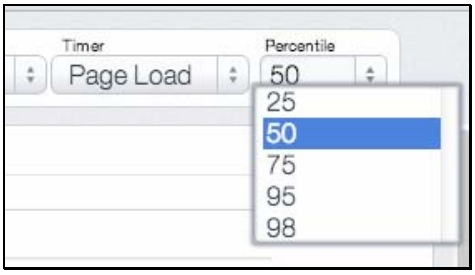
This release introduces the filter attribute, Percentile, to mPulse dashboards, with the added ability for users to select an aggregation level from among pre-sets or by entering one.

With this change, mPulse now supports viewing any percentile.

Percentile filtering appears on the default filter toolbar of the mPulse Dashboard with pre-sets of 25th, 50th, 75th, 95th, and 98th percentiles.



Users can select a preset from the Percentile drop-down.



Or, enter a custom percentile using the drop-down's entry field.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Enhancements

CloudTest

Stopping a Script or ISSE

This enhancement allows a long-running Script, or script within an ISSE, to be stopped prematurely when a Composition is stopped, such as via the Stop button. Note that a Script can only be stopped in-between JavaScript "instructions", so if there is a single JavaScript statement that is taking a long time (such as a complex Regex, for example), the Script may not be able to be stopped until that JavaScript statement completes.

Clip, Track, or Band Doesn't Get Focus in Results Details Dashboard

As of this release, Clips, Tracks, and Bands will get focus in the right panel of the Result Details dashboard, when selected on the left navigation tree.

Better error message when there are too many components in the Results Details

The Play (General mode) prompt will now indicate more precisely how many components is too many.

Pending timeout should be ignored for Cloud Providers that don't support early termination

The pending timeout setting in the Grid Manager is now ignored for Cloud Providers that don't support pending servers (i.e., GoGrid, IBM SmartCloud).

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

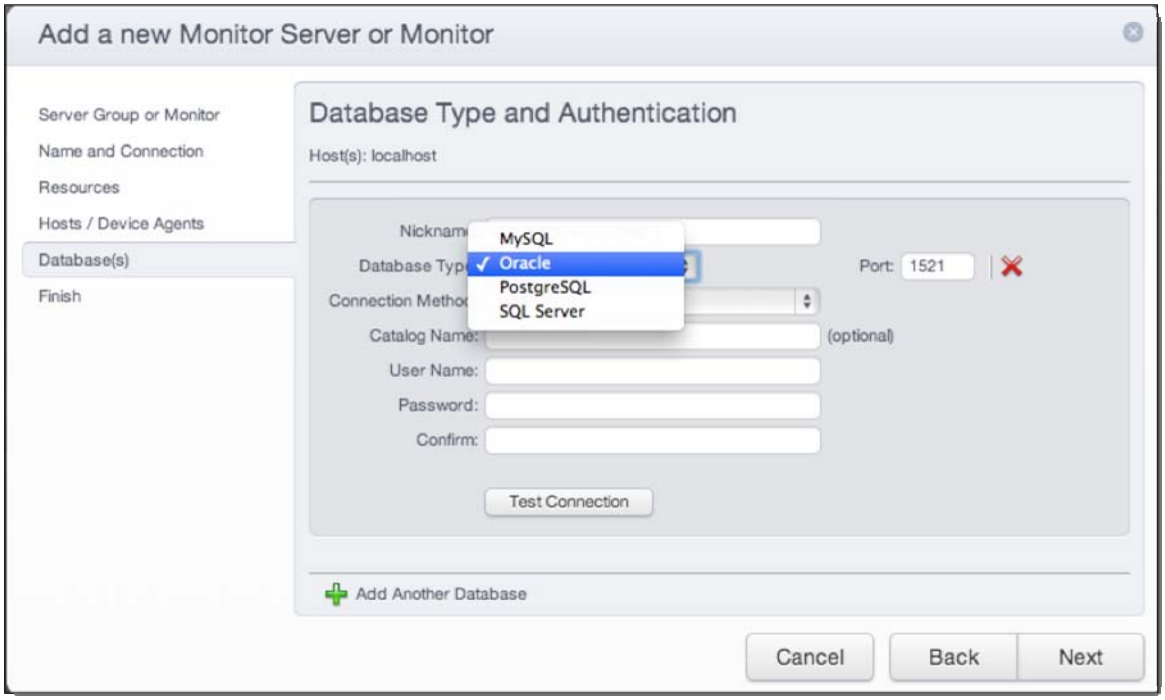
Database Monitoring Improvements

This release expands the ways in which CloudTest users can monitor databases—including two new database types as well as eight new resource types, and the ability to view these new resource types in new analytic charts provided for that purpose.

Setting Up Monitoring Server Groups and Monitors for Databases

The Central > Monitoring Server Groups and/or Monitor wizards remain the same for this change, however, four database types are now available, as well as eight new monitoring resource types (discussed below). Two of the four resource provider (e.g. database) types for monitoring, Oracle and SQL Server, are new to this release.

1. To monitor a database, go to CloudTest and click Monitoring Server Groups under Monitoring to create a group for the database instance.
2. Then, click Monitors to create a monitor for the monitoring server group.
3. During either Monitor Server Group or Monitor configuration, select the database type to monitor in the Database Type and Authentication page.



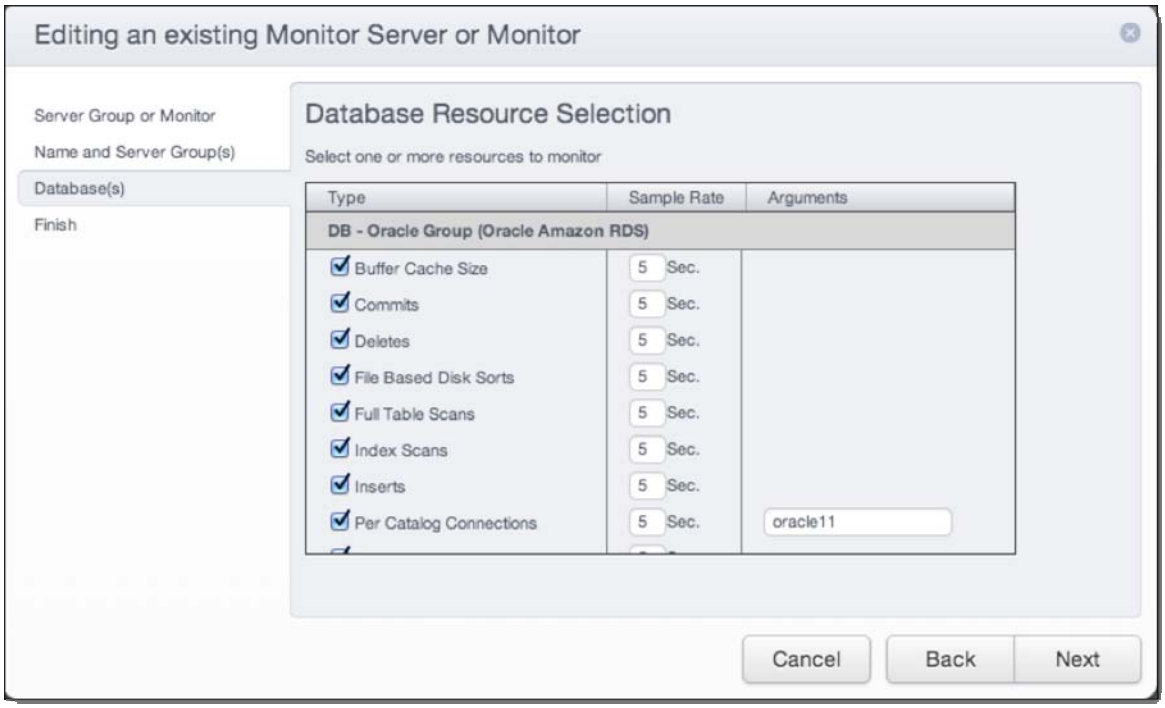
In the screenshot above, database type selection occurs as part of the overall definition of a new Monitor Server or Monitor using the Database(s) page. Existing Monitor Server Groups or Monitors can also be revised to include this database monitoring.

4. Provide the necessary database connectivity credentials, minimally to include user name, password, and password confirmation.

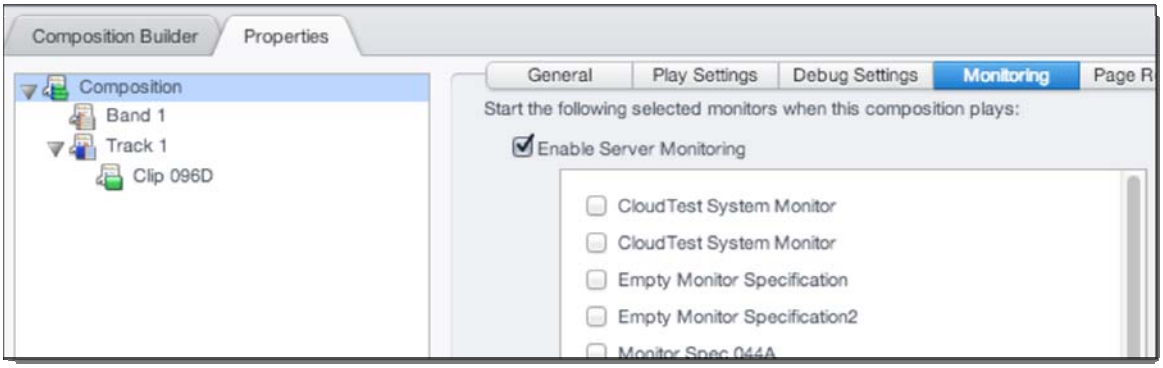
Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

5. Click Test Connection to verify successful connectivity.

6. Next, define the Database Resource Selection for the given database type by checking the relevant resources to monitor.



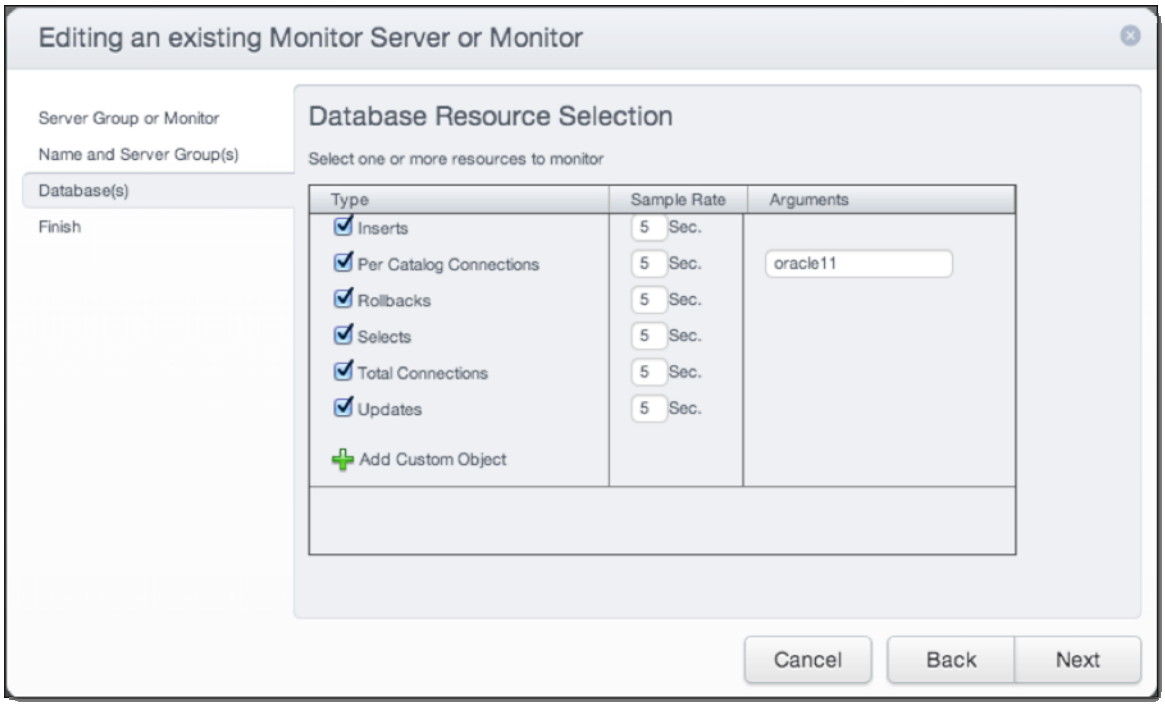
7. Click Finish after performing the above steps.
8. Ensure that you Enable Server Monitoring and check the box for the monitor(s) you wish to use in a test composition (refer to Starting a Monitor Automatically When a Test Composition Runs). You can also use the Central > Monitors, View Analytics link for any given, listed monitor (refer to Starting and Stopping a Monitor).



The eight new resource types for monitors are shown in alphabetical order alongside the previously existing four resources types in the resource selection page (above). The new resource types are:

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

- Buffer Cache Size – The size of the database buffer cache, in bytes
- Deletes – The number of DELETE statements issued to the database (MySQL, Oracle, SQL Server), or the number of rows deleted from the current catalog (PostgreSQL).
- Disk Sorts – The number of sorts that required creating a temporary table on the disk. This metric is not supported when monitoring PostgreSQL.
- Full Table Scans – The number of full table scans across all queries.
- Index Scans – The number of index scans across all queries.
- Inserts – The number of INSERT statements issued to the database (MySQL, Oracle, SQL Server), or the number of rows inserted into the current catalog (PostgreSQL).
- Selects – The number of SELECT statements issued to the database (MySQL, Oracle, SQL Server), or to the current catalog (PostgreSQL).
- Updates – The number of UPDATE statements issued to the database (MySQL, Oracle, SQL Server), or the number of rows updated in the current catalog (PostgreSQL).



The previously existing resource types were:

- Commits – The number of transactions committed.
- Per Catalog Connections -- The number of active connections to the specified catalog.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

- Rollbacks -- The number of transactions rolled back.
- Total Connections -- The total number of active connections, across all catalogs.

New Database Action XML and JSON Format Outputs for Supporting Multiple Results

Direct to Database early adopters should note that in this release the schemas for XML and JSON formats have been changed to allow for the output to contain multiple "results".

TIP: For an introduction to this important new feature, which was introduced in SOASTA 47, see Direct to Database Testing.

In the case of XML, a new `Result` tag has been added underneath the existing root `Results` tag, as well as a new `Output` tag as the root.

For JSON, the top level tag is “output” for an JSON object represented by the second level tag “results”, which is in turn a JSON array for multiple results. Each result is a JSON object consisting of the “summary” and “data" objects or just the "data" object.

Note: Support for multiple results using the CSV output option is not available at this time. This is due to the limitations of the CSV format, Since we can't know this ahead of time, there will be a runtime error if a given Database Action ends up returning multiple result sets and the output format requested was CSV.

Summary of XML and JSON Output Format Changes

For examples of output formats, see Database Query Results in Result Details.

`xml`	Retrieved rows will be formatted as XML. Applies to "SELECT FROM" statements only. **The root node of the XML document is now `Output`, which contains the `Results` element that contains one or more `Result` elements for multiple results. Each result contains one `Data` element.**
`xml-with-summary`	Retrieved rows will be formatted as XML with summary element. Applies to "SELECT FROM" statements only. **The root node of the XML document is `Output`, which contains the `Results` element that contains one or more `Result` elements for multiple results. Each result contains the `Summary` and `Data` elements.** The summary element contains some information about the columns specified in the "SELECT FROM" statement, including column name,

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

	column (data) type, and approximate column size.
`json`	Retrieved rows will be formatted as JSON. Applies to "SELECT FROM" statements only. **The top level tag is `output`. The tag at the next level is `results,` which for a JSON object contains one or more results represented by a JSON array. Each result contains one JSON object with the `data` tag.**
`json-with-summary`	Retrieved rows will be formatted as JSON with summary. Applies to "SELECT FROM" statements only. **The top level tag is `output`. The tag at the next level is `results` which for a JSON object contains one or more results represented by a JSON array. Each result contains two JSON objects with the `summary` and `data` tags.** The summary value contains some information about the columns specified in the "SELECT FROM" statement, including column name, column (data) type, and approximate column size.

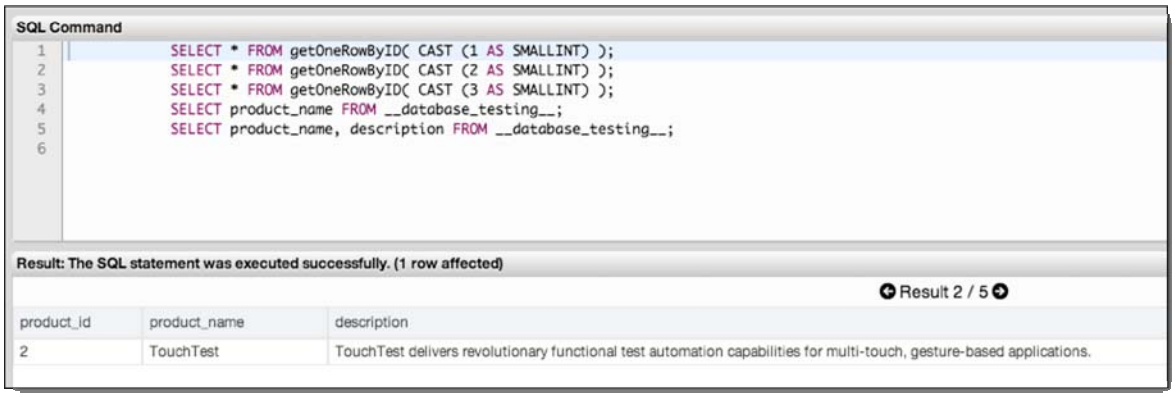
Stored Procedures in the Result Details Dashboard

In the following screenshots, five results are shown individually.

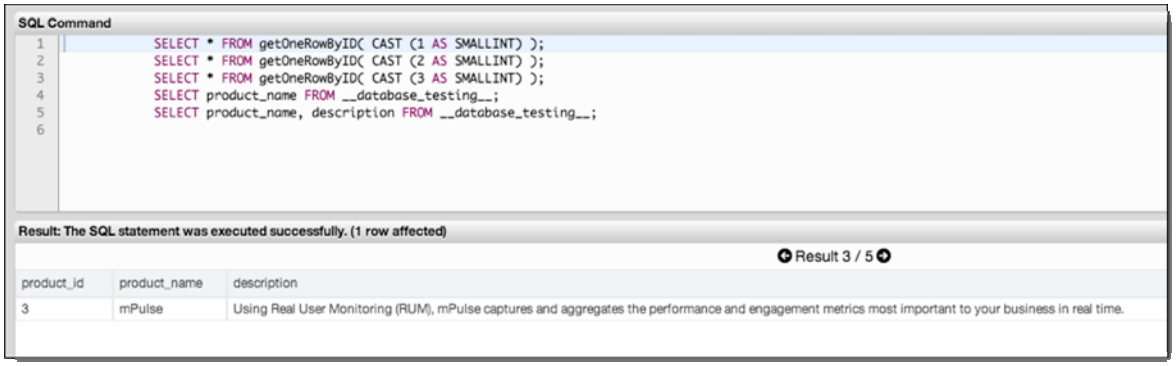
The first of the five (Result 1/5) results is shown below.

Note that the following three screenshots correspond to the first three results for the stored procedure calls (shown above). Three columns of data are shown for the given row.

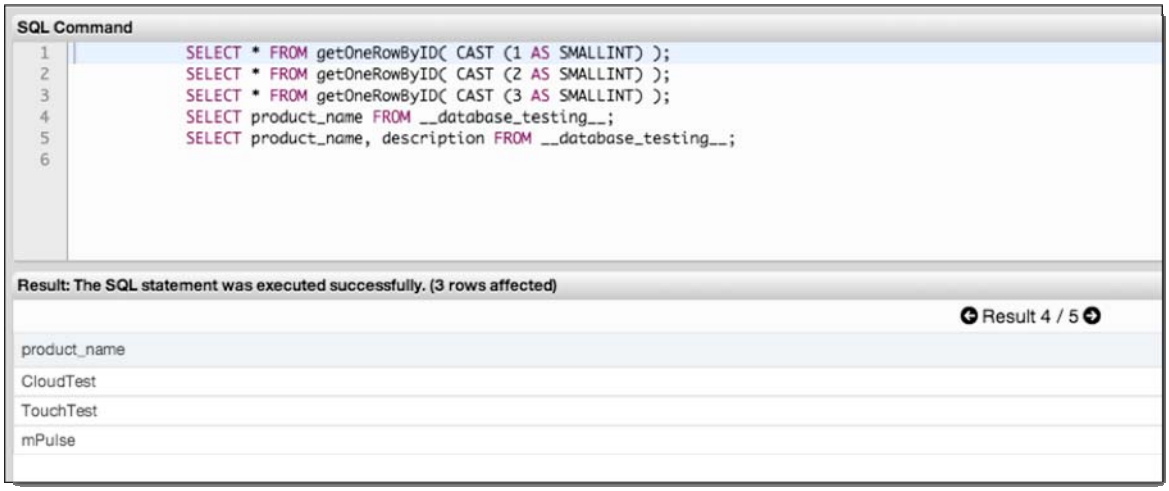
Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.



Each of the three results on this page contains three columns of data.

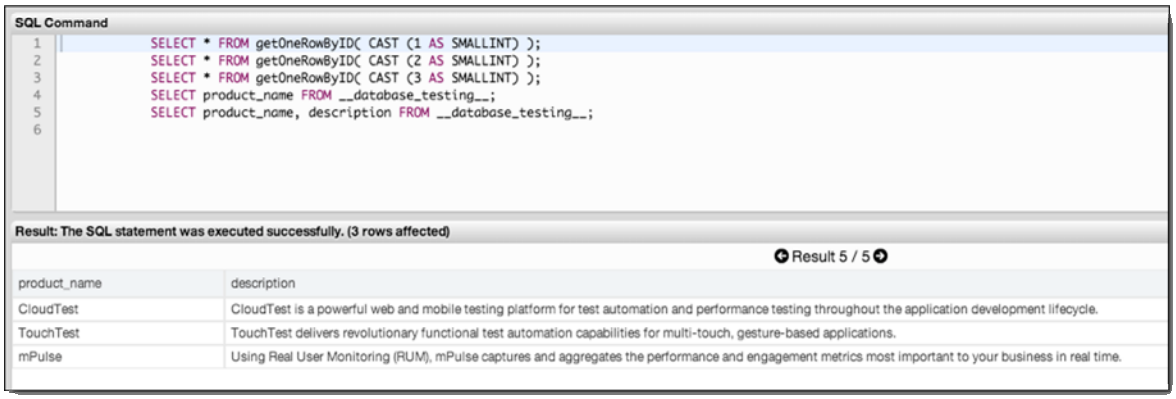


The fourth query returns one column of results.



The fifth query returns two columns of results.

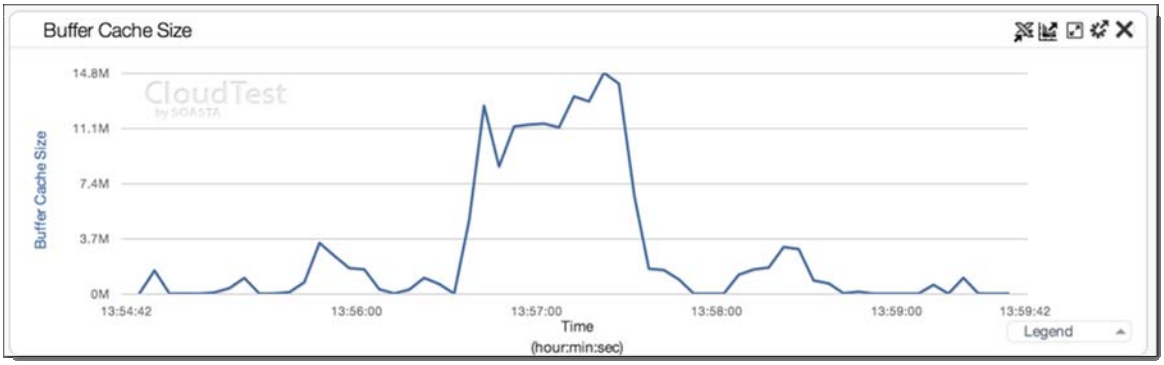
Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.



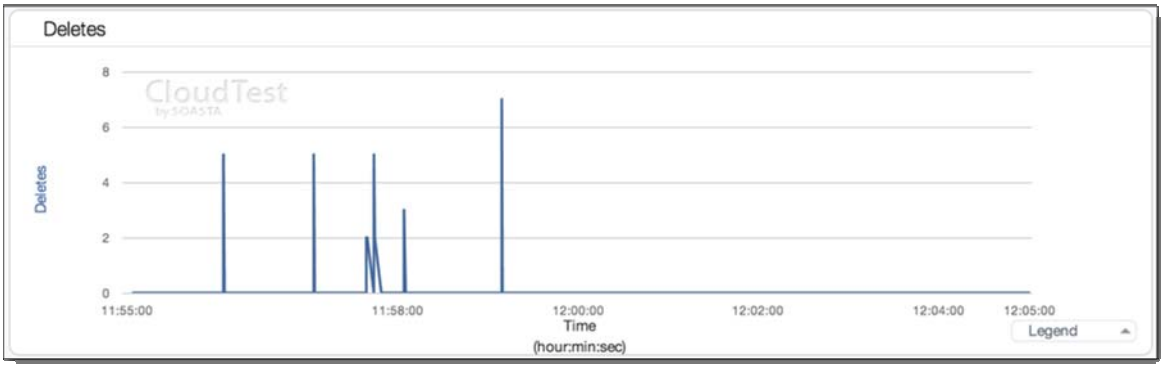
New Database Monitoring Widgets

There are eight new monitor dashboard widgets for the eight new resource types. These are found in the Widget Type Selection Panel's Widget Type, Monitor category:

- Buffer Cache Size – The size of the database buffer cache, in bytes



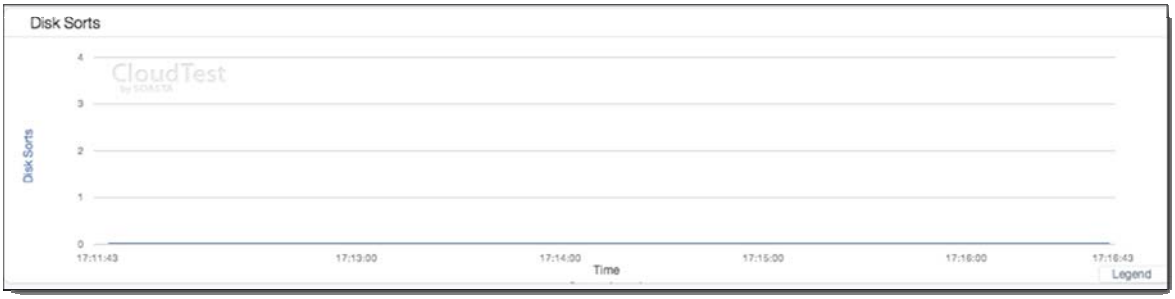
- Deletes – The number of DELETE statements issued to the database (MySQL, Oracle, SQL Server), or the number of rows deleted from the current catalog (PostgreSQL).



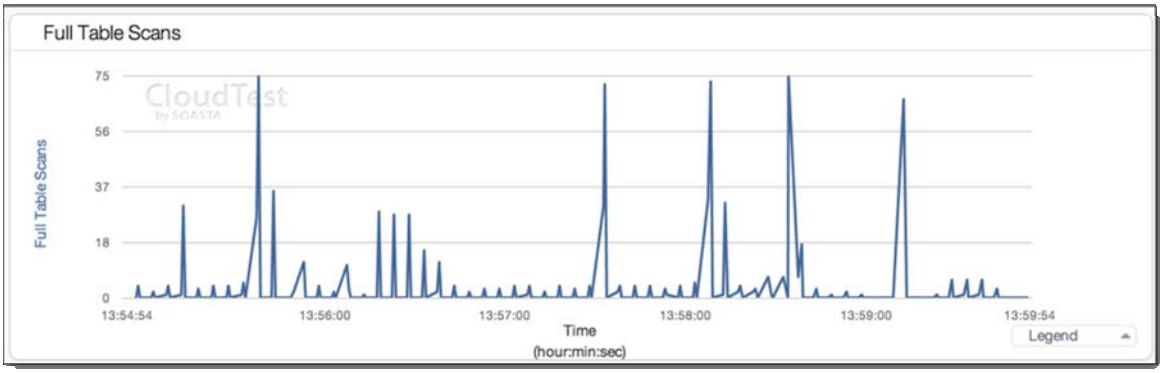
- Disk Sorts – The number of sorts that required creating a temporary table on the disk. This metric is not supported when monitoring PostgreSQL. The

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

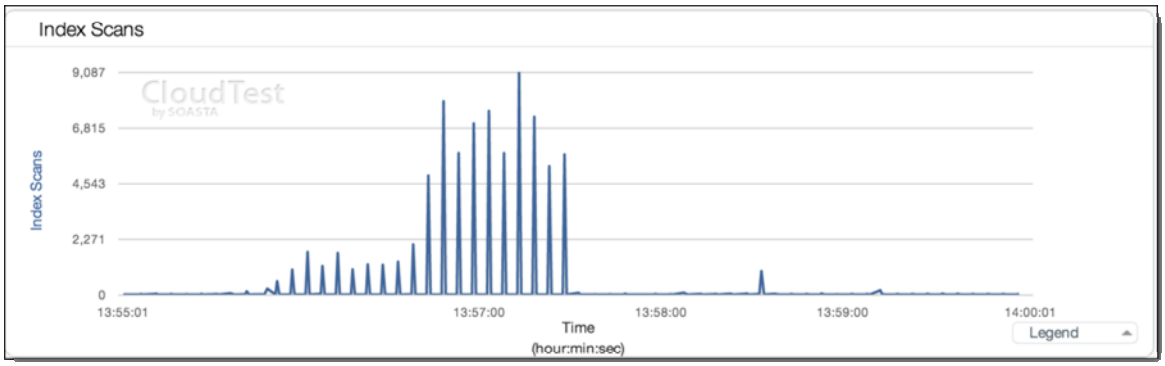
Disk Sorts widget does a simple count. When the count is zero, the Y-axis lists 1, 2, 3, 4.



- Full Table Scans – The number of full table scans across all queries.

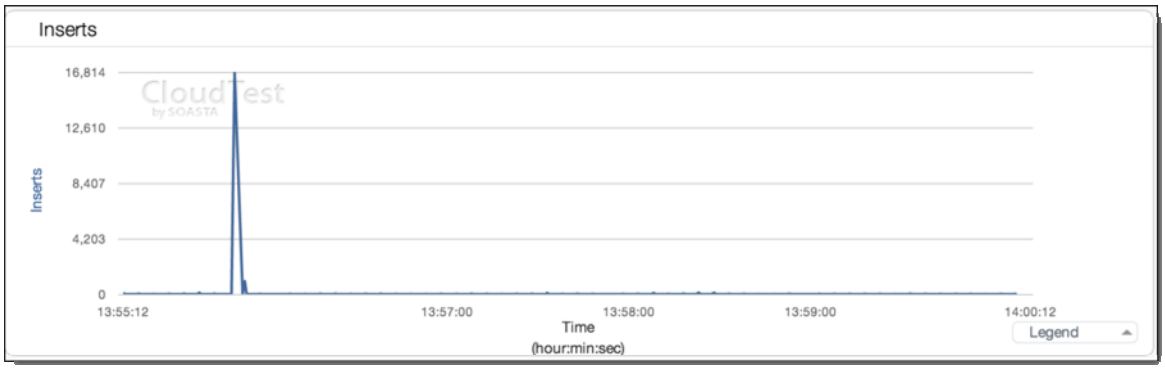


- Index Scans – The number of index scans across all queries.

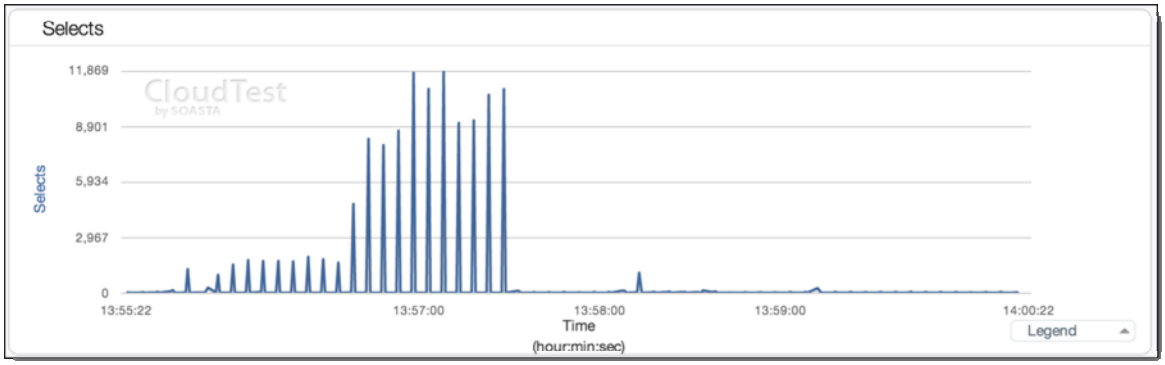


Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

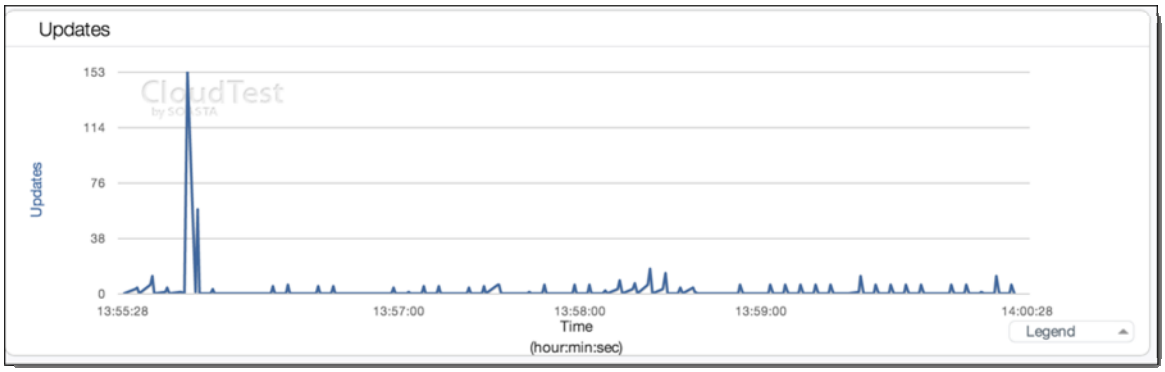
- Inserts – The number of INSERT statements issued to the database (MySQL, Oracle, SQL Server), or the number of rows inserted into the current catalog (PostgreSQL).



- Selects – The number of SELECT statements issued to the database (MySQL, Oracle, SQL Server), or to the current catalog (PostgreSQL).



- Updates – The number of UPDATE statements issued to the database (MySQL, Oracle, SQL Server), or the number of rows updated in the current catalog (PostgreSQL).

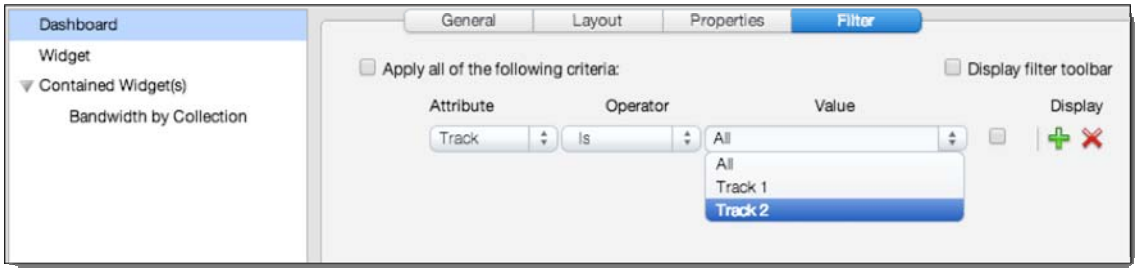


Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Track Filtering Improvements

In prior releases, filtering by track was not supported by any widgets.

Note: The dashboard-level Track filter was added for use by the Virtual User Ramp Controller; no widgets supported it prior to this release.



Now, widgets for Clips and for Collections can also be filtered by track.

For TouchTest users, by-track filters can also be used as an equivalent of by-device filtering when there is one device per track (e.g. by selecting a device in the Track's Location drop-down). It should be noted that if devices are set at the clip-level, then using the track filter as an equivalent of "location" will not be possible.

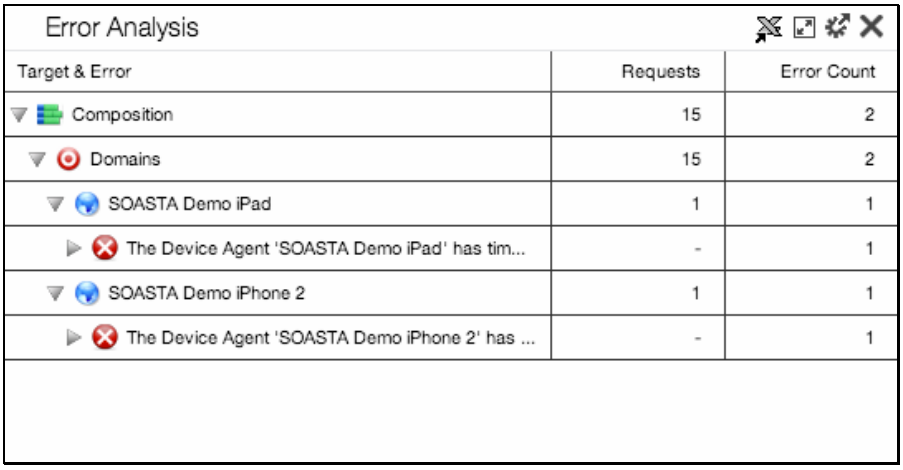
Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Error Analysis for App Actions and Browser Actions

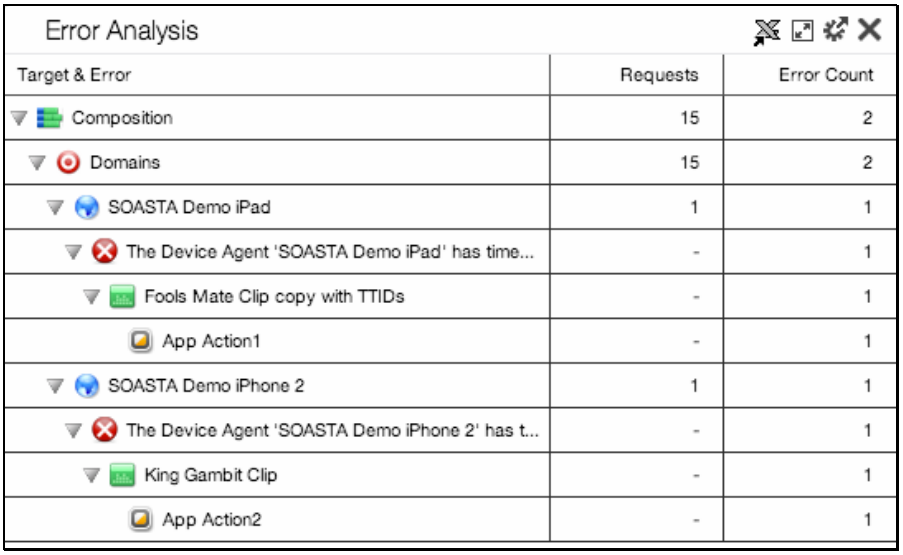
As of this release, TouchTest devices will appear in the Error Analysis widget under the Domains node, which formerly only listed HTTP messages (e.g. under the Domains node in the Error Analysis widget). Now, both browser actions (WebUI) and app actions (TouchTest) are listed.

App Actions in the Error Analysis Widget

For app actions, devices appear under the Domains node.



Expand the error node under the Domains node to inspect the Device(s) and its errors. If there is more than one, the errors are organized by the given device.



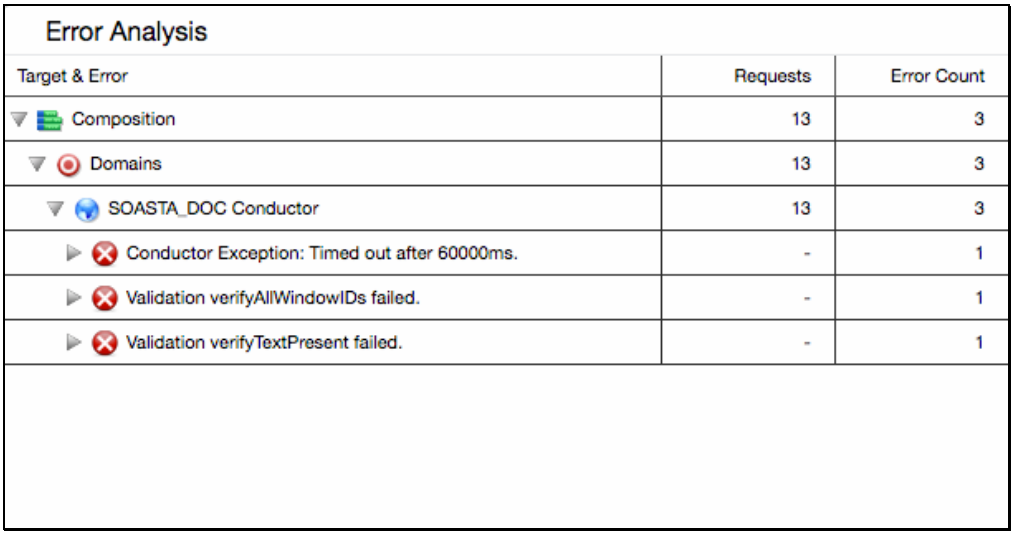
Note: As noted in the Track Filtering Improvements section of these release notes, in cases where one device is utilized per track, the Track filter can also be used as an equivalent of device location (e.g. via awareness of a given device in a given location or by

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

naming a device agent (TouchTest Agent) to correspond to a given location).

Browser Actions in the Error Analysis Widget

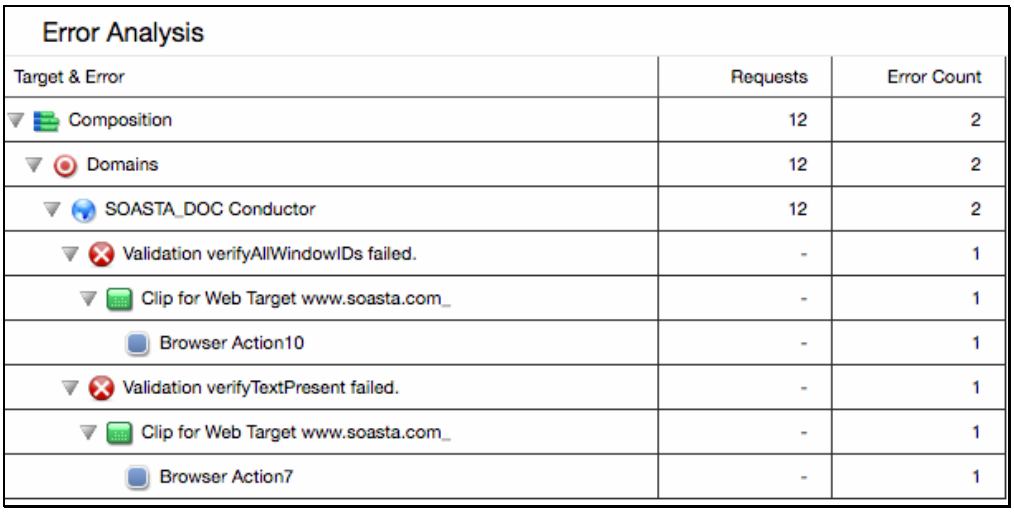
For browser actions, errors appear under the Domains node.



Error Analysis

Target & Error	Requests	Error Count
Composition	13	3
Domains	13	3
SOASTA_DOC Conductor	13	3
Conductor Exception: Timed out after 60000ms.	-	1
Validation verifyAllWindowIDs failed.	-	1
Validation verifyTextPresent failed.	-	1

Expand the error node under the Domains node to inspect the Conductor(s) and its errors. If there is more than one Conductor, the errors are organized by the given conductor name.



Error Analysis

Target & Error	Requests	Error Count
Composition	12	2
Domains	12	2
SOASTA_DOC Conductor	12	2
Validation verifyAllWindowIDs failed.	-	1
Clip for Web Target www.soasta.com_	-	1
Browser Action10	-	1
Validation verifyTextPresent failed.	-	1
Clip for Web Target www.soasta.com_	-	1
Browser Action7	-	1

Note: As noted in the Track Filtering Improvements section of these release notes, in cases where one Conductor is utilized per track, the Track filter can also be used as an equivalent of client location (e.g. via awareness of a given client in a given location or by naming a Conductor to correspond to a given location).

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

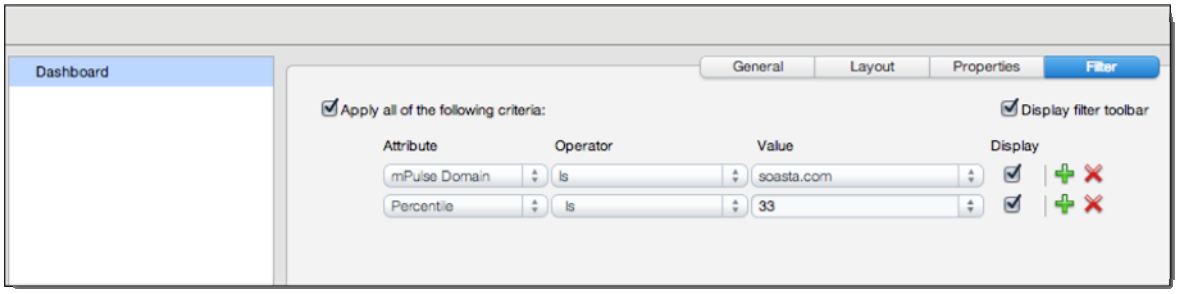
mPulse

Defining a Dashboard Percentile using the Edit Panel

Percentile can be set up for custom dashboards either by cloning a system dashboard, or, by defining Percentile as an attribute to filter by via the Dashboard Edit Panel in a new dashboard.

1. Enter Toggle Dashboard Edit Panel mode in the custom dashboard.
2. Do the following for the dashboard or widget:

- For dashboard filtering, select the Dashboard node in the list and then click Filter.



- For widget filtering, select the Widget node in the list and then click Filter

3. Revising an existing row, or add a new row, and then set the row attribute to Percentile.
4. Select a pre-set percentile or enter a custom value.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

TIP: Click Display filter toolbar if you intend for this to appear on the dashboard filter toolbar.

5. Click Apply and then OK to exit the Edit Panel.

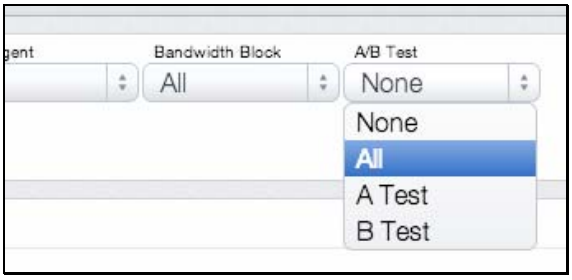
Percentile filtering is available in all of the following widgets:

- AB Tests
- Browsers
- Geography
- Multi-Histogram
- Page Groups
- Summary

Percentiles are not relevant to User Agent breakdown or Bounce Rate & Session Metrics.

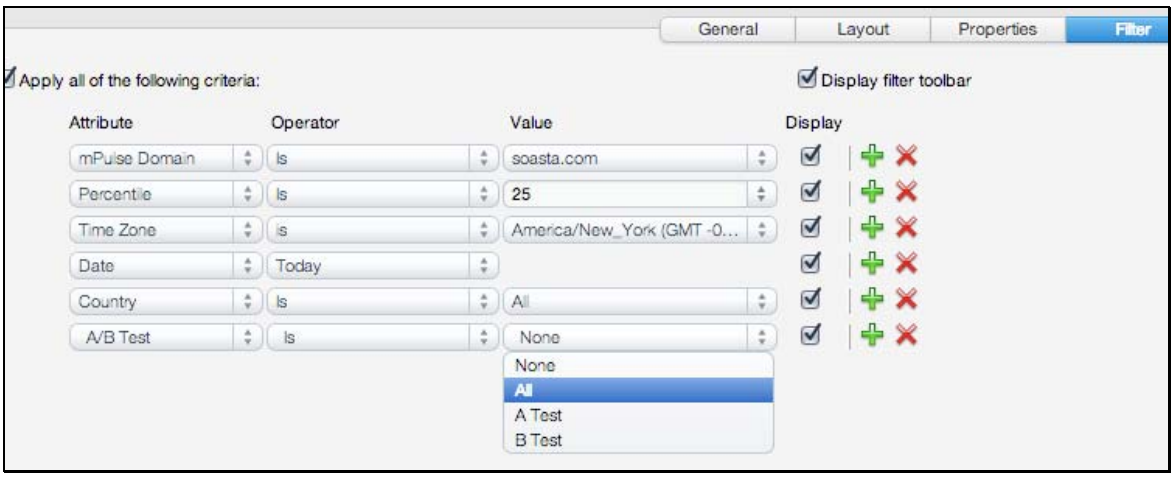
New 'All' default option in A/B Test filter

The A/B Test widget filter now shows a new All option, which is also the new default option for this filter. When All is selected, dashboard data will show results from all test groups. The filter is shown below as displayed on the Dashboard filter toolbar.



As with any filter, A/B Test, including its new All option, can also be added to custom dashboards and toolbars via the Dashboard Edit Panel.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.



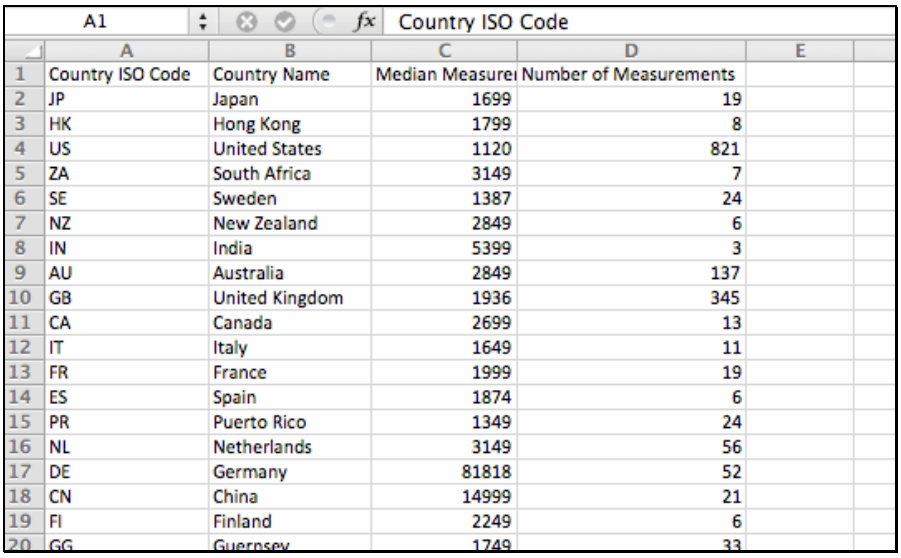
Formerly, this toolbar filter setting had only None (and whichever A/B groups are defined) as an option.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Allow CSV exporting of data from the Geography widget.

As of this release, users can now use the Export icon on the mPulse, Geography widget to export widget data to a CSV format spreadsheet.

To do so, hover the mouse over the Geography widget title bar, and then select the Excel icon and specify the local folder to save the comma-separated value(s) (CSV) file.



A1 | Country ISO Code

	A	B	C	D	E
1	Country ISO Code	Country Name	Median Measure	Number of Measurements	
2	JP	Japan	1699	19	
3	HK	Hong Kong	1799	8	
4	US	United States	1120	821	
5	ZA	South Africa	3149	7	
6	SE	Sweden	1387	24	
7	NZ	New Zealand	2849	6	
8	IN	India	5399	3	
9	AU	Australia	2849	137	
10	GB	United Kingdom	1936	345	
11	CA	Canada	2699	13	
12	IT	Italy	1649	11	
13	FR	France	1999	19	
14	ES	Spain	1874	6	
15	PR	Puerto Rico	1349	24	
16	NL	Netherlands	3149	56	
17	DE	Germany	81818	52	
18	CN	China	14999	21	
19	FI	Finland	2249	6	
20	GG	Guernsey	1749	33	

The exported fields in this release are Country ISO Code, Country Name, Median Measurements, and Number of Measurements.

Other Analytic Changes in This Release

The following changes to RUM widgets are also effective as of this release:

- Load Time by Minute is now known as Timer Over Time
- Timer Over Time (a.k.a. Load Time by Minute) and Median Load Over Time have been combined. The Timer Over Time widget now covers both of these cases.
- Bounce Rate Per Page Load Time is now Metric per Timer (noted elsewhere)
- Metrics by Minute and Metric over Time have been combined. The Metric over Time widget now covers both of these cases.
- The Timer Over Time, Metric over Time, and Measurements Over Time widgets all support user definable time windows now.

Sessions per Page Load Time is now Sessions Per Timer (noted elsewhere)

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

TouchTest

TouchTest Web User-Agent Setting (iOS Only)

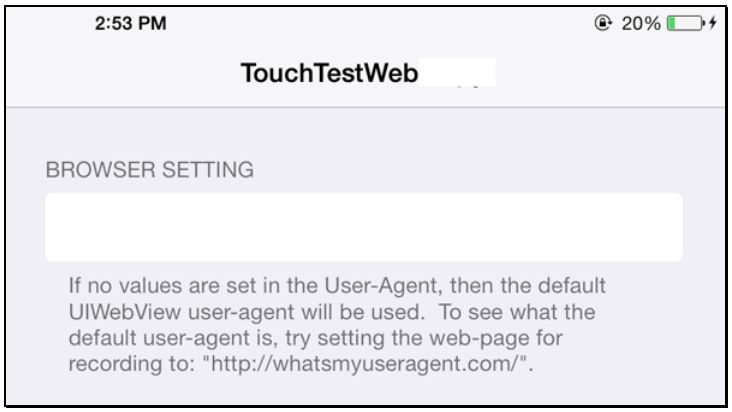
This feature [requires new TouchTest Web].

TouchTest Web for iOS users can now customize mobile web recording sessions to emulate a specific mobile browser by specifying the necessary user-agent string in the mobile device's Settings.

Use the following steps to specify a browser (User-Agent) by string from within the mobile device's iOS Settings, TouchTest Web settings.

1. To set the User-Agent for recording or playback, open the iOS device's Settings.
2. Locate and tap TouchTest Web.

3. When TouchTest Web is selected, the Browser Setting field appears.

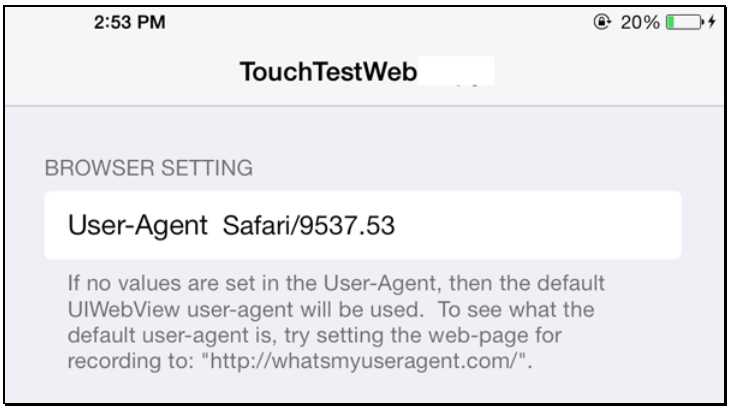


TIP: When the Browser Setting field is blank, the default browser for the given device is in use.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

4. To emulate a specific browser, enter either its long form or short form user-agent string.

For example, in the screenshot below the Safari short-form, `Safari/9537.53`, is in use.



The Safari long-form will also work (as will the short- or long-form for all major browsers:

```
Mozilla/5.0 (iPhone; CPU iPhone OS 7_0_3 like Mac OS X)
AppleWebKit/537.51.1 (KHTML, like Gecko) Version/7.0 Mobile/11B511
Safari/9537.53
```

–Or–

```
Mozilla/5.0 (Macintosh; Intel Mac OS X 10_8_5) AppleWebKit/537.36
(KHTML, like Gecko) Chrome/31.0.1650.57 Safari/537.36
```

Note: As noted earlier, this setting is persistent and it's a good practice to blank the field when you are done with a specific recording/playback.

When in doubt, inspect the Settings, TouchTest Web, Browser Setting on the given device, or, you can also use http://www.whatsmyuseragent.com to see what user-agent is set).

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

Bugs Fixed

CloudTest Bugs Fixed

71443: (CloudTest) Dropping widgets at bottom fails sporadically

Attempting to drop widgets into the bottom of a dashboard would fail unexpectedly in some cases.

71408: (CloudTest) Unable to rename a reserved IP address

Renaming a Reserved IP Address from the lower panel does not seem to have any effect.

71355: (CloudTest) Validations are not preserved during duplicate clip element

Duplicating a clip element would fail to carry over any of its validations.

71218: (CloudTest) Charts not showing data for test

For a given result in an environment, the Average Response Time and Send Rate are not showing any values in charts.

71156: (CloudTest) Capture Screenshot size seems to be random

Sometimes the Result Details, captureScreenshot output was too small to be viewable, leading users to believe that Conductor had failed to take a screenshot. Maximizing would expand the window enough looked fine and the screenshot was viewable.

71155: (CloudTest) Error while duplicating action that had a Screenshot Validation

After recording an action, and then adding a screenshot validation, this error would occur if that action was duplicated.

70815: (CloudTest) Charts not displaying after changing filter or other changes

Charts were not behaving well in using remaining space after chart restart.

70813: (CloudTest) Drag and drop issues in dashboard

Dragging widgets on other widgets would sometimes get stuck. Additionally, dragging widgets into the footer was hard to do if there weren't widgets there already.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

70812: (CloudTest) Dashboard doesn't allow widget to be dropped

The dashboard didn't show drop targets if there weren't any widgets on drag.

70650: (CloudTest) Total VU count is not refreshing after changing the 2nd track VU in Composition Editor

This case was due to a webkit (chrome/safari) specific rendering bug where setting innerText doesn't immediately redraw the element all the time. This caused the VU count bug, as the number inside the element when inspected was 40, but it was still showing 20 because of the webkit redraw bug. The VU calculation was working fine, and now, CloudTest will use textContent where it formerly used innerText, resulting in performance improvements.

70282: (CloudTest) Monitoring Server Groups - Label missing "Group"

The Monitoring Server Groups wizard incorrectly used the label Monitoring Server.

70075: (CloudTest) Dimension filter values queried twice when a value is selected

This fix will prevent a query for filters for the lower panel while changing the surface if the lower panel isn't visible.

70024: (CloudTest) Only check for non-playing results once per tenant

Tokens were unexpectedly kept alive more than the maximum five hours.

70005: (CloudTest) Add Validation didn't work if the locator contained Xpath

This error would occur while adding a validation to a message whose locator was an Xpath.

69174: (CloudTest) Grid deploy gets stuck if the attached IP address fails

Deploying an environment with Reserved IP Addresses in the Repository that are actually invalid would result in this error.

69092: (CloudTest) Fundamentals Widget broke at end of test

The Fundamentals widget would display an error message after test completion indicating that a result of ResultID 0 couldn't be found.

68701: (CloudTest) External Data Source UI allowing illegal URLs

A user was unexpectedly able to enter an illegal URL (e.g. it had a space) in the External Data Source user interface.

67708: (CloudTest) Severs not being shown in running grid

In some cases, servers didn't show up until a grid was terminated.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

67699: (CloudTest) Saving a composition that was opened from a clip in Central fails to stop spinning

This happened on Save when a user right-clicked a clip in Central to open in a composition. After picking a name and clicking ok, the "Saving Test Composition" status text never went away.

67414: (CloudTest) Misaligned Checkbox and label in Clip Editor, Outputs section

The "Only if there is an error" checkbox was not left aligned as expected.

67321: (CloudTest) isBoolean discrepancies in the inline editor, lower panel for waits and validations

In some cases an additional text input field would appear in the Waits or Validations forms in an expanded action or in the lower panel.

67103: (CloudTest) Null pointer occurred because the list of running results included a null when a result was for a different RS DB

This null pointer exception occurred in a multi-Results-Database scenario.

66729: (CloudTest) Property sets in Clip Editor are misaligned

Layout in the Clip Editor lower panel, Property Sets <Before/After> tabs was off.

66022: (CloudTest) report generation dialog spinner misplaced

The Creating Report spinner appeared in the wrong place after exporting a report.

65876: (CloudTest) Script error in Server List editing

An error occurred while editing the Server List.

65548: (CloudTest) Renaming a tenant error causes the CloudTest Error Message box to become inaccessible

Renaming an existing tenant caused this error and the error box to become inaccessible.

65457: (CloudTest> The cloud provider account: cannot launch results databases

The error box should've caught an underlying error.

65455: (CloudTest) Unable to use return key in error descriptions

Entering a bug description with a carriage return in it and it submitted the dialog instead of inserting a carriage return.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

65351: (CloudTest) Selenium will now auto-remove alerts/confirms/prompts in Firefox Cross-Domain

Alerts and other modal boxes didn't work as expected if a browser test was using Firefox Cross-Domain

65274: (CloudTest) Error Analysis widget does not work for database actions

Database actions in results didn't display as expected in the Error Analysis widget.

62395: (CloudTest) Switching tabs in the clip editor causes focus to be in the wrong frame

This happened after saving a clip with 1 or more clip elements in it. When the Save dialog comes up, switching to another CloudTest tab like Central, then switching back to the Clip Editor tab and pressing the Delete key would cause focus to be in the wrong frame.

62136: (CloudTest) Composition failed to load

A test composition that was trying to load to 1200 servers should have had enough verified servers to load but unexpectedly failed. Now, the Server List version is checked on the abort and close of a monitor.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

TouchTest Bugs Fixed

71454: (TouchTest) VerifyElementPresent failing when it is present, when switching from VerifyElementText

Switching a true validation from verifyElementText to verifyElementPresent, would cause the verifyElementPresent to fail, even if it is present.

71365: (TouchTest) Able to select a Device Agent in Track-level drop-down that isn't Mobile Web Enabled

An underlying issue in the Track/Clip drop-down code caused devices that were not mobile-web enabled to be selectable. Now, that track/clip dropdown will correctly disable device agents that are not mobile-web enabled whenever there is a mobile-web target in use. Additional help text appears on the disabled device in the dropdown indicating why it can't be selected.

69255: (TouchTest) outputViewHierarchy doesn't use available space in expanded Result Details, Outputs section

The output, outputViewHierarchy, didn't use the available space when expanded in the Outputs section.

67677: (TouchTest) Error opening CloudTest from Jenkins plugin

An iframe error occurred accessing a CloudTest window from within Jenkins.

71387: (TouchTest) Android Device Timeout on TouchTest Web clips [requires new TouchTestDriver] and [requires new TouchTest Web]

The TouchTest Agent unexpectedly timed out while TouchTest Web clips were in action.

71235: (TouchTest) Unable to select same Device Cloud on different track

The Composition Editor was treating device clouds like device agents and unexpectedly subjecting them to the same restrictions.

71233: (TouchTest) Ability to see DeviceType for a TTW Clip. [requires new TouchTestDriver (Android only)]

The Device Type in TouchTest Web can now be seen.

71138: (TouchTest) outputEval for box missing float: left causes output value box to be on the left of Value label

A layout issue occurred for a TouchTest Web result in the Summary panel of Result Details.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

71091: (TouchTest) storeWebEval unexpectedly failed [requires new TouchTestDriver]

The storeWebEval accessor unexpectedly failed to store an extracted property set's value.

70878: (TouchTest) Pre-processor didn't define TiUISearchBar or TiUIButton, preventing successful Android app build

Now, TiUISearchBar and TiUIButton are dynamically defined *if* the preprocessor knows about them.

70752: (TouchTest) TouchTest Agent stuck in connected mode

A TouchTest Agent indicated Connected status after a composition was force aborted, but the repository status was still Testing.

70605: (TouchTest) Bug in Master Detail Layout in iOS 7; [requires new TouchTest Driver]

Due to a bug in iOS 7 with the master detail layout, on some devices using TouchTest, the UIWebView (detail contents) was shifted down from where it should be. This circumstance would cause the captured touch locators to be wrong (e.g. because TTD saw the UIWebView where it should be, rather than where it was).

70315: (TouchTest) Screenshot Validation Tabs Wrapping

The three tabs in the Screenshot Validation form in Result Details were unexpectedly wrapping (e.g. the Diff tab would appear on a new row).

69650: (TouchTest) Don't modify AppDelegate when handleOpenURL or openURL are commented out

If the handleOpenURL or openURL method is commented out in a project's AppDelegate file, MATT will now display an error message and should not modify the AppDelegate file.

68968: (TouchTest) Auto Stop Time fail on mobile composition

Additional null checking has been added to detect further occurrences of this issue.

67030: (TouchTest) Hybrid App records but does not play back

A mobile test clip recorded from a given hybrid app wouldn't play back as expected.

66224: (TouchTest) If condition evaluates to be false when it should be true

The clip will now wait for the loading page to go away before evaluating the conditional.

65813: (TouchTest) Global Navigation menu issue

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

A tap on a button menu would succeed to expand a button menu but wouldn't succeed to collapse it.

mPulse Bugs Fixed

65961: (mPulse) Performance Breakdown triple chart stops polling

In the browser that the request was made, not all of the responses were returned. Since a combined chart will not poll until it has received all of the data the issue really was that a response was lost.

71417: (mPulse) BarCharts series should not stack up on each other

This fix resolves an occasional issue in which bar chart lines would appear stacked unexpectedly.

71438: (mPulse) At tilted camera views the heatmap surface can look clipped

The Filled surface on large landmasses such as the US gets clipped prematurely.

71398: (mPulse) Hybrid layout isn't computing min path height when widget has filter bar

The widget filter bar would cause unexpected layout issues.

71308: (mPulse) Heatmap Pop-ups position incorrect in recent Firefox

The Heatmap label would popup in an incorrect position in Firefox 25.

71288: (mPulse) Framebuffer attachments causing CPU latency

The mPulse Globe dashboard's performance was less than expected due to underlying CPU latency.

71279: (mPulse) Widgets are too tall when maximized or popped out

Maximized or popped out widgets were too tall.

70720 (mPulse) JS error when opening newly imported operational dashboard

This error would occur in Firefox 12 on Linux.

70178: (mPulse) Other dashboards polling every second for past days

Dashboards other than the main mPulse dashboard were querying every second even when the current day was in the past.

70663: (mPulse) TimeInterval code assumes a day is 24 hours

The Time Interval assumed a day is 24 hours long; however, this is not true of days when DST switches over.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.

69397: (mPulse) Tile Layers do not match for Globe/Columbus Views - Globe view is correct

This fix adds zoomRatio offsets for both 3d/2d to be able to have some finer control on when the level loads.

69396: (mPulse) Globe sizing issue

Opening a globe in half screen (e.g. via a custom dashboard layout) and then switching it to Columbus view would result in a flat earth that wasn't properly scaled.

69252: (mPulse) Multiple globes causes error and crash

Running multiple instances of the Globe would cause a context clash resulting in an underlying memory leak.

TouchTest failed to record a shake action that is expected to be recordable.

68738: (mPulse) Changing time zone also changes date if time zone is ahead of UTC

Changing times and time zones in the UI wasn't doing what it should consistently.

66187: (CloudTest) TypeError: this.selected_cell is undefined; JS line 2630

An error occurred while selecting or unselecting widgets in the dashboard.

66030: (mPulse) Tenant list on mPulse can show duplicate entries

In some cases with many tenants, the Tenant list could show duplicate entries.

63365: (mPulse) DWR Exception on Metrics Analysis dashboard when running in offline mode

If network connectivity was missing, the attempt to access a given web host would cause this error whenever that connection failed.

Copyright 2013. CloudTest is a registered trademark of SOASTA, Inc. and/or its affiliates. Other names may be trademarks of their respective owners.