SOASTA 54.21 (CloudTest/TouchTest 7732.278)

Apr 29, 2015

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Features

CloudTest

Baseline Comparison

This release introduces a new high-level summary dashboard, Baseline Comparison, which presents a new capability by which transaction metrics can be compared between results for nested compositions using a *baseline* result.

For example, if we compose a test whose Virtual User ramp levels are 1x, 2x, and 3x virtual users, then we might name our nested compositions accordingly (e.g. 1x, 2x, and 3x). These nested compositions will be compared with a user-defined *baseline* composition result (e.g. if 1x = 100 VU, then 2x = 200 VU, and 3x = 300 VU).

TIP: The 1x, 2x, 3x example scenario used in screenshots in this article are not required but test authors should note that dashboards are *most useful* when the Transaction names are consistent across all of the nested Compositions. Consistent transaction across compositions ensures that "Transaction 1" metrics are presented together, which is the basis for the baseline comparison.

Currently, one widget—the new Collection Baseline Comparison widget—is included in the Baseline Comparison system dashboard. SOASTA has kept that vertical real estate available as the tabular chart info can expands for larger result sets..

TIP: The Collection Baseline Comparison widget can be added to any custom CloudTest dashboard.

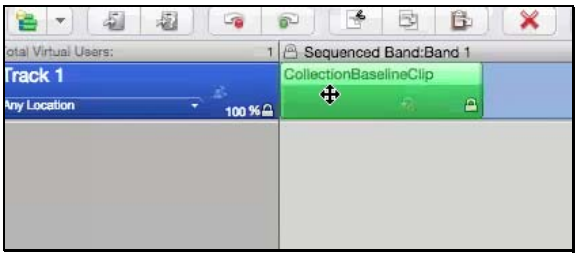
Result from Wed Apr 29 10:40:34 PDT 2015

Min VU Count 77% ▾ Collection Is ▾ All ▾

	Baseline		
Transaction ▲	1x	2x	3x
Transaction1	245 ms	60 ms	54 ms
Transaction2	60 ms	68 ms	60 ms
Transaction3	60 ms	63 ms	88 ms
Transaction4	59 ms	61 ms	58 ms
Transaction5	65 ms	60 ms	54 ms
Transaction6	62 ms	57 ms	56 ms

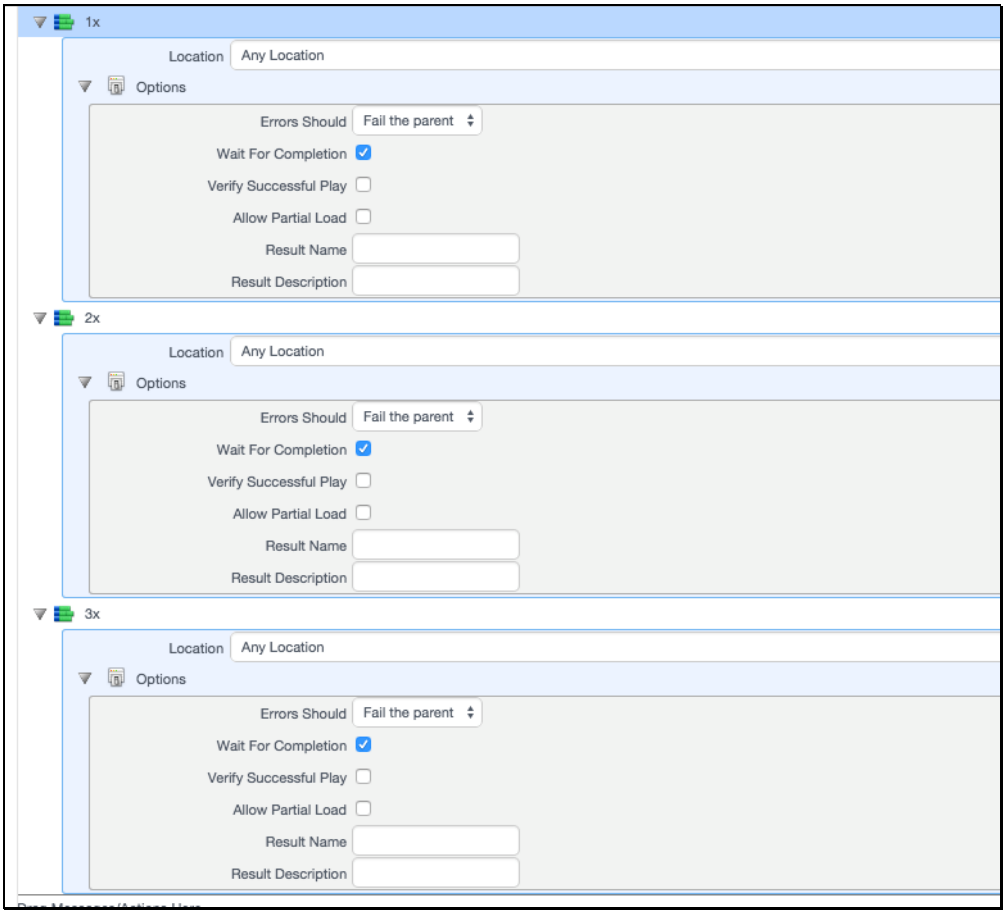
Setting Up A Composition To Use Baseline Comparison

To use the Baseline Comparison, a test composition that makes use of the collection type “Transaction” is required.

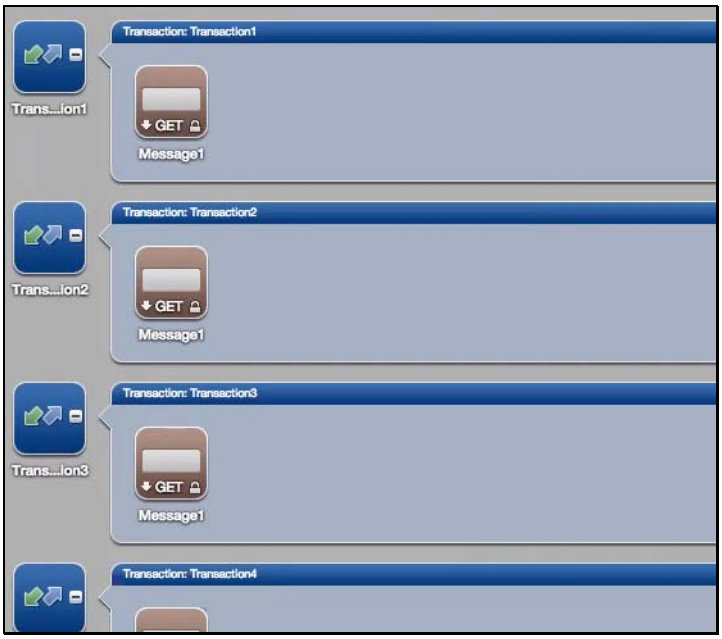


For example, we set up such a test composition using a parent composition whose sole test clip (shown above) contains three nested compositions, each of which is intended for representation of 1x, 2x, and 3x Virtual Users.

The nested composition “1x” (shown below) contains 100 VUs, “2x” contains 200 VUs, and “3x” contains 300 VUs.

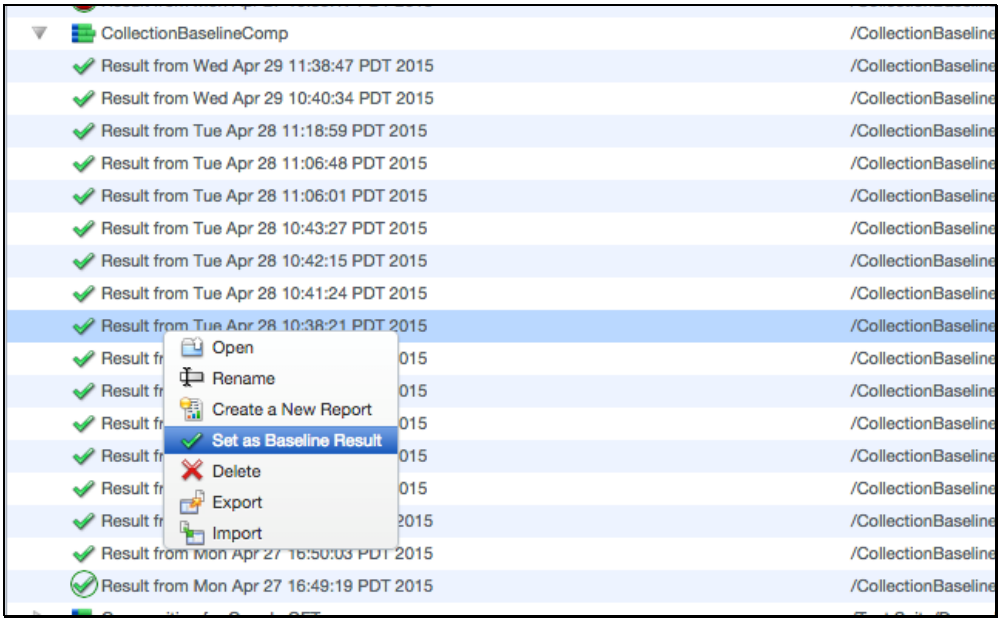


In each of the test compositions, a series of Transactions have been created (as shown in Icon View below).



Refer to Creating Transactions for a complete background reference to CloudTest transactions, including steps.

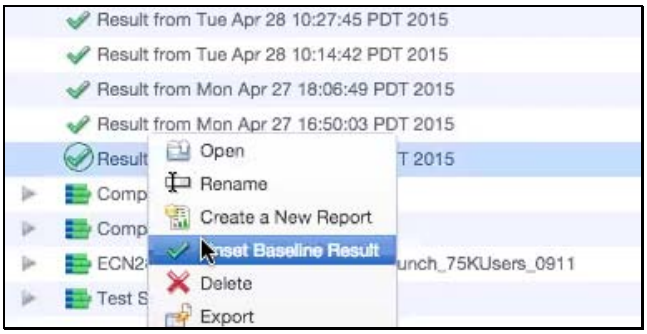
1. To use Baseline Comparison, first choose a CloudTest result and then to set it as the "baseline" for its Composition, so that future results can be easily compared to this specific baseline result.



- To do so, navigate to Central, Compositions and then expand the node to show the child results for that composition.

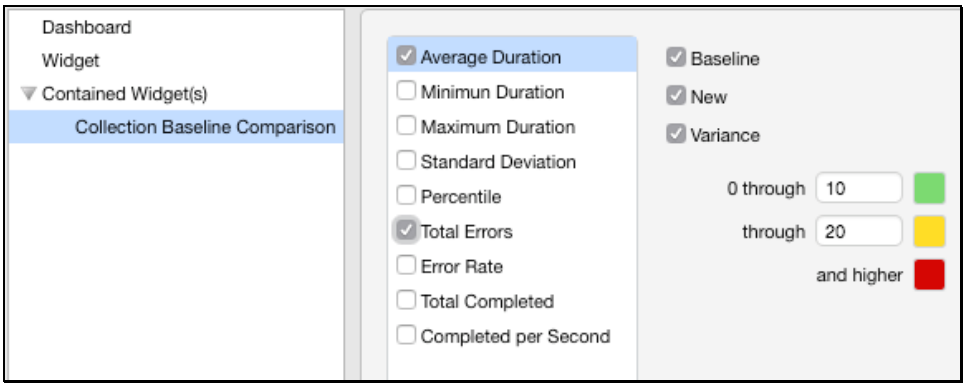
- Select the result you'd like to set as the baseline and then right-click to select *Set As Baseline Result*.

TIP: Use the opposite action on an existing baseline to *Unset Baseline Result*.



Run the test composition created above. If a baseline composition was set, then the Baseline Comparison will appear in the Composition Editor, Play tab.

By default, the Baseline Comparison widget displays Average Duration (shown above) and Error Rate.

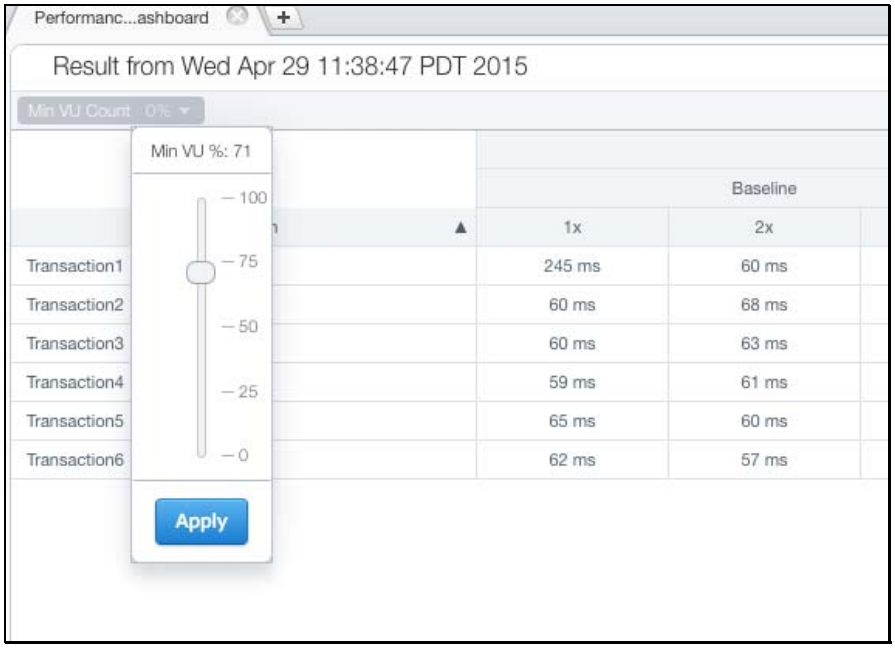


2. Use the lower panel Dashboard Editor to change which dashboard default metrics are shown.

The following additional Baseline Comparison metrics are available for display:

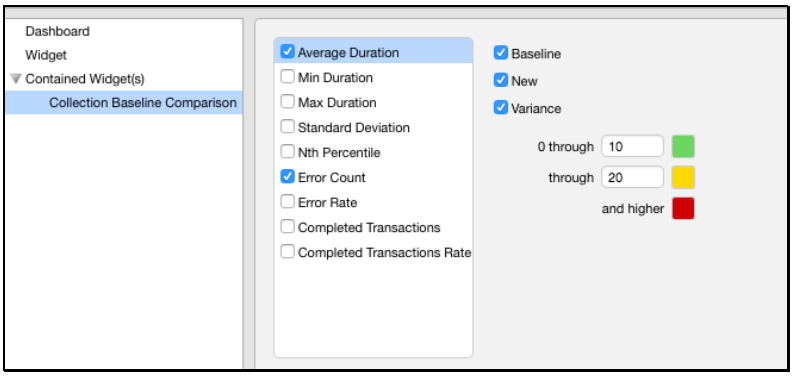
- Minimum Duration

- Maximum
- Standard Deviation
- *N*th Percentile
    - If the user selects Percentile, a slider appears on the Collection Baseline Comparison widget to choose the percentile.



- Total Errors
- Total Completed
- Completed per Second

Refer to [Understanding Metrics in CloudTest Analytics] if these metrics are unfamiliar to you.



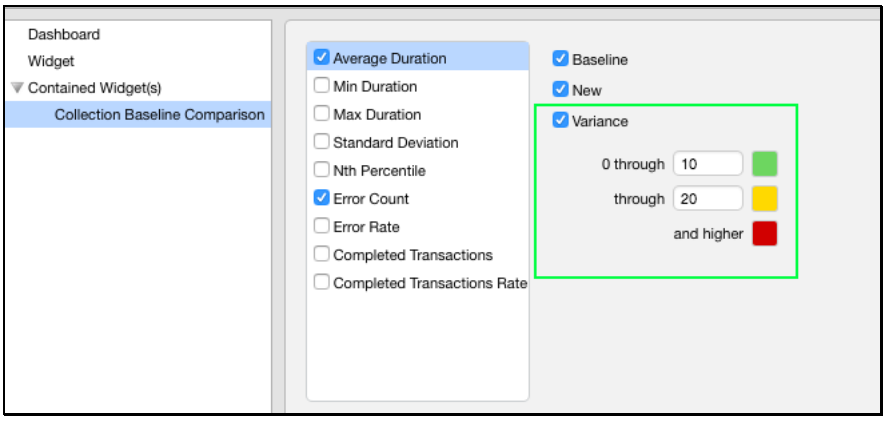
3. For each metric, choose which columns to display:

- *Baseline* (shows the numbers for the baseline result, if any).
- *Selected* (shows the numbers for the selected result).

- *Variance* (shows the `(Selected/Baseline)` ratio, as a percentage).

By default, CloudTest displays all three of the above columns.

4. If Variance is checked, optionally choose the ranges for green, red, and yellow. By default, a negative or zero value is green (indicating that the metric improved or stayed the same), a value between 1% and 10% is yellow, and a value greater than 10% is red.



CloudTest will dynamically render a column for each selected metric and for **each nested Composition** (e.g. “1x,” “2x,” and “3x”).

If there are no nested Compositions, then the Collection Baseline Comparison widget's Nested Composition section is omitted.

Bugs Fixed

CloudTest

92784: Custom Module binary converter does not work with WebSocket

The Java Custom Module binary converter didn't work as expected with a WebSocket clip.

92613: Error unregistering WebSocket wait

This error occurred while using Wait in a web socket handler.

92611: WebSocket: Unable to set value of Property after it's been used in a wait

CloudTest wasn't effectively unregistering the wait on a WebSocket clip, which after use, prevented property values from being set.

92601: Optional Parameter is required to ignore certificate and host validation in SeedData:URL and readFromURL

This fix removes certificate and hostname verification for the downloading of seed data.

92597: Custom Command Charts need decimal resolution

The Custom Command support introduced in CloudTest 54 supported only whole numbers. The resolution of this issue amends that support to include decimal resolution.

TouchTest

92567: KeyPress recorded on old build does not work on a new build

A KeyPress in an older test clip actually had no locator(s) on playback.

SOASTA 54.20 (CloudTest/TouchTest 7732.259)

Bugs Fixed

CloudTest

92506: Composition fails to load when Encrypted Seed Data exists

Compositions failed to load when encrypted Seed Data was used and the expected prompt to enter credentials never appeared.

92410: JSON Path on WebSocket Timing Extraction Errors out when an id does not exist

While using JSON Path on WebSocket, Timing Extraction would err if an id key did not exist. This is now handled.

TouchTest

92489: TouchTest UI freezes when playing big compositions

In a large, complicated mobile test, the Composition Editor, Saving Composition loading status would display for an inordinately long time. This release introduces some limited incremental improvements in performance for large mobile tests.

SOASTA 54.19 (CloudTest/TouchTest 7732.254)

Bugs Fixed

CloudTest

92090: IllegalStateException when trying to use a custom DNS server

Don't unlock root when resolving DNS host, because we don't lock it.

TouchTest

91462: Unable to reach apps page from Android

The TouchTest App for Android download was not reachable.

SOASTA 54.18 (CloudTest/TouchTest 7732.242)

Bugs Fixed

CloudTest

91628: Conductor not passing authentication credentials to the Target site

While using a WebSocket-enabled Conductor to communicate with a WebSocket server the Conductor returned HTTP 502 and recording failed.

TouchTest

92162: Waits fail with error “webview not found" [requires new TouchTestDriver]

In prior releases in hybrid apps, TouchTest Web would record selectuiwebview for multiple web views if the web view that the user interacted with had changed. For example, if w1 and w2 were found and if both were visible, but the user only interacted with w1, then no extra action would be recorded for w2. But, if the user went from w1 to w2, then that subsequent action would get recorded.

Now, during recording, if there are multiple web views (visible or not), TouchTest Web will automatically record an initial selectUIWebView action, to indicate to the user to manually specify its value.

SOASTA 54.17 (CloudTest/TouchTest 7732.231)

Bugs Fixed

CloudTest

92206: Invalid "Set-Cookie" header in response (Unable to parse expiration date parameter: "")

After encountering an invalid cookie the test stopped processing the response. Now, when invalid cookie date formats are encountered in both Chrome and Firefox they will be handled.

SOASTA 54.16 (CloudTest/TouchTest 7732.227)

Bugs Fixed

CloudTest

91977: JavaScript Error While Loading Widget Type Categories

A JavaScript error prevented adding widgets from the selection panel.

91889: Globe Alignment Flyout labels lose position

Globe Flyout Labels would drift off into space in some environments (notably on some MacBook Pros). This phenomenon was seen internally as well in Case 90333 after clicking the Globe Align Left or Right commands, after which the Activity Arcs labels were out of alignment.

91672: Unable to replay .svgz files while replaying clip

The user had recorded a flow that includes calls to resources with the svgz extension. However, the following error would occur on playback:

```
Failed to de-compress HTTP response. Unexpected end of ZLIB input stream (com.soasta.common.exceptions.CommonException)

Unexpected end of ZLIB input stream (java.io.EOFException
```

91265: Conductor not installing correctly in multiple Windows laptops during CloudTest training

Conductors in a multi-client Windows network were unexpectedly installed in manual mode rather than the expected "Conductor as a service" mode required for the context.

91620: Nested schema are not being imported for WSDL Targets

When creating a new target with a WSDL definition, nested schema are not being imported to define message parameters.

91618: Conductor fails to get CPU info for process on Linux

The CPU per process (HTTPD) metric unexpectedly failed to appear while doing system monitoring on Linux.

90917: CloudTestManager account has enough permissions to deploy, but cannot deploy

A CloudTest Manager user who lacked Cloud Provider Account access was not alerted in a user-friendly manner. Now, a modal error will occur indicating the CPA credentials issue.

90333: Globe issues with Flyout Labels

Globe Flyout Labels would drift off into space in some environments (notably on some MacBook Pros). This phenomenon was seen internally as well in Case 91889 after clicking the Globe Align Left or Right commands, after which the Activity Arcs labels were out of alignment.

TouchTest

91901: TouchTest Web: Android Unavoidable redirect when accessing site [requires new TouchTest Web]

While accessing a given site through TouchTest Web for Android, a redirect to a black screen would unexpectedly occur. Subsequent attempts to reload the original page resulted in the same redirect.

91817: App exists in the middle of recording [requires new TouchTestDriver]

An unexpected app anomaly occurred whilst recording the mobile test clip

91624: Instrumenting JSoup HTML parsing library is not supported with Android dynamic instrumentation [requires new TouchTestDriver]

MATT Android crashed upon encountering the JSoup library.

91418: Unable to login to try.soasta.com from Android devices on NTT public cloud

A TouchTest Agent attempting to login from the NTT cloud unexpectedly failed to do so.

91357: Not able to playback actions on left navigation of Android App [requires new TouchTestDriver]

Fixes issue wherein a TouchTest view was unexpectedly considered a view that was part of the customer's app.

SOASTA 54.15 (CloudTest/TouchTest 7732.194)

Bugs Fixed

CloudTest

91362: HP Cloud leaves behind ports on deployment error and HP deployment improvements

This fix changes the search for servers after they are started, now instead of using unpredictable changes-since, search is done by name, which use a SOASTA-generated UUID. Additionally, this fix includes code for if an HP server launches into Error status, we clean up its resources, and launch a new one.

90110: WebSocket recording does not capture single-character receives

This issue happened because of incorrectly reading the mask of the WebSocket frame.

91092: Conductor using Websocket option does not record anything

The Conductor recorded fine without the WebProxy option enabled, however, after enablement nothing gets recorded (HTTP or WS).

87268: Increase CLOUDTEST_JBOSS_HEAP_SIZE for r3.4xlarge Main in a dual-instance environment

The heap size has been adjusted accordingly.

TouchTest

91046: Android app crashed after few steps while recording [requires new TouchTestDriver]

The given Android app was not recordable using the prior TouchTest Driver.

SOASTA 54.14 (CloudTest/TouchTest 7732.189)

Bugs Fixed

TouchTest

91509: TouchTest Lite signup page didn't handle exceptions caused by expired links

TouchTest Lite users who accessed links that had expired sessions received errors rather than the expected Login screen.

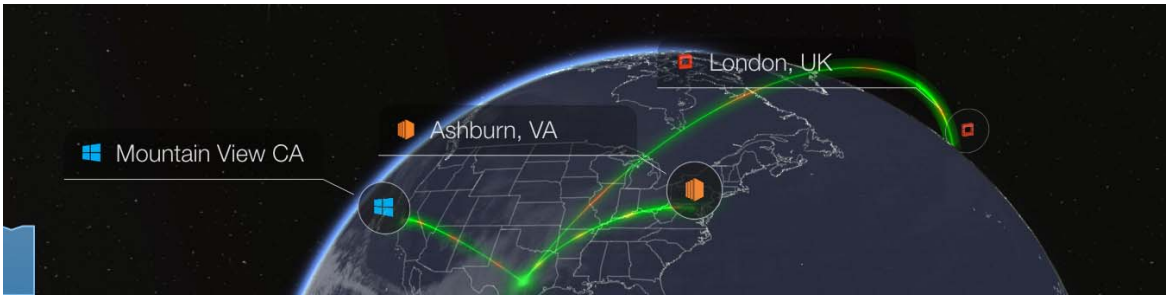
SOASTA 54.13 (CloudTest/TouchTest 7732.186)

Enhancements

CloudTest

Cloud Provider Account icons for Global Arcs (90967)

Cloud Provider Account (CPA) icons now appear with Arc labels as of this release.



Arcs will display the corresponding CPA icon to provide additional visual input in test compositions utilizing any supported Cloud Provider account.

Bugs Fixed

CloudTest

84416: Some Azure Cloud Services are not deleted when servers get deleted

This could happen if the cloud service was created but deploying a VM in this cloud service somehow fails. Previously, we only deleted cloud services that contained running VMs. Now, we will instead keep a list of cloud services that were created as a part of grid deployment.

71075: Backup and Restore not working

Backup was not including sequence tables for large databases so the restore would not work.

TouchTest

90691: iOS TT: Specific items on page always return item is not accessible or enabled when it should be accessible [requires new TouchTestDriver]

For UILabel in UICollectionView, make the claim that they're accessible.

85460: Touch Locator Tool not working on 64-bit devices for apps compiled with arm64 [requires new TouchTest Web app] | [requires new TouchTestDriver]

Using the Touch Locator tool to identify objects on the device screen (iPhone 5s/iOS8.2) unexpectedly failed (e.g. selection does not grey-out, and touching the screen results in empty Locator boxes). This release includes fixes to WEPopover library files that resolve the issue.

SOASTA 54.12 (CloudTest/TouchTest 7732.159)

Bugs Fixed

CloudTest

90427: Remove "Stop JBoss" button from CloudTest Admin

As of this release, the CloudTest Admin no longer permits the user to stop the underlying JBoss server.

89676: Find and Replace hangs when executing on a recording that contains WebSocket messages

Attempting Find and Replace would hang the system if a recording was searched that also had WebSocket messages.

69410: Allow Concurrent Logins for Non-browser Sessions (except Lite products)

In prior releases, API and 3rd party sessions would evict concurrent browser sessions. Now, Concurrent logins are permitted in all SOASTA versions with the exception of Lite product versions.

42931: Transfer-Encoding should take the place of a Content-Length header

CloudTest failed to correctly recognize that Transfer-Encoding should take the place of a Content-Length header in a Packet recording, which resulted in this Java HTTP exception when CloudTest attempted to send both header types.

TouchTest

90713: Android TT: Locators returned during clip recording are only generic Xpath or classname[#] [requires new TouchTestDriver]

This fix allows recording of IDs in obfuscated apps by using the Android activity API.

SOASTA 54.11 (CloudTest/TouchTest 7732.141)

Bugs Fixed

CloudTest

90712: Error thrown when Set-Cookie domain is blank

CT throws an error (albeit a very descriptive error) when the domain attribute of the Set-Cookie response header is blank. Now, the host is used for the cookie domain, if necessary.

90552: Conductor | Zaproxy fails to load on Windows 7 on VMWare Fusion seamless mode

While using Zaproxy on Windows VM using VMWare fusion, zaproxy failed to start since it uses a default home directory that is read only. A Windows-specific fix for setting the home directory has been added.

90477: Missing string for Environment lower panel

The Region label was missing in the Environment lower panel, General tab.

90210: TouchTest Clip Editor: Unable to put Clip into Group when only item in Clip

The Create a Group context command was missing if an embedded clip was placed into an empty clip and then selected.

TouchTest

87100: App can record but crash on playback [requires new TouchTestDriver]

This fixes instrumentation when the inputManager method invocation fails

71379: Android: this should report the exception in the result and bring back TouchTest Agent [requires new TouchTestDriver]

This fix improves the crash handler mechanism for Android.

SOASTA 54.10 (CloudTest/TouchTest 7732.127)

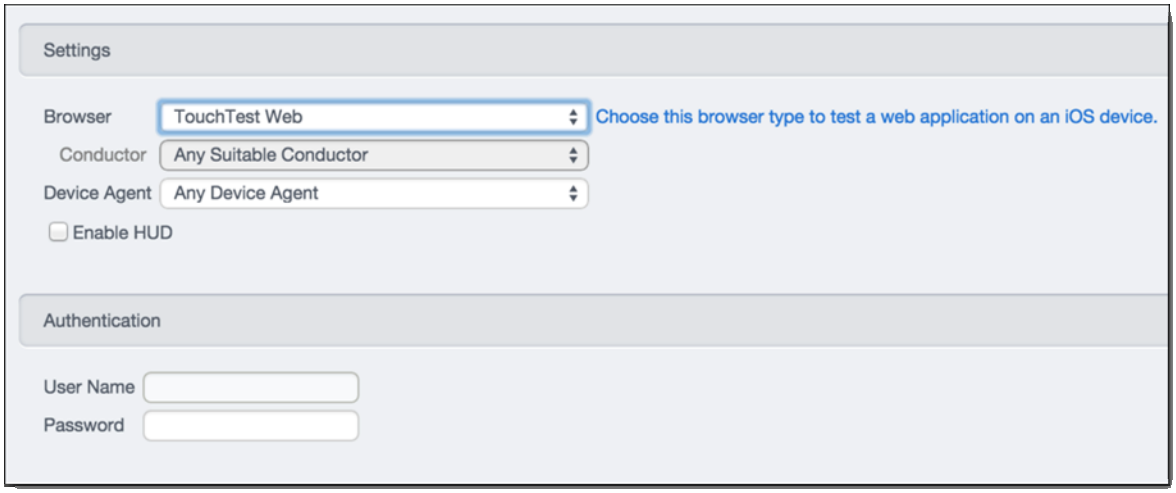
Enhancements

TouchTest

88142: Target Editor Now Includes Authentication Fields for Mobile Web Targets (WebUI/iOS)

The WebUI/Ajax Target Editor now includes additional certification fields for web mobile targets akin to those provided for HTTP targets.

To utilize these authentication fields, please create a WebUI/Ajax target, and in the Target Editor change its browser type to TouchTest Web, after which the User Name and Password fields shown below will appear.



Bugs Fixed

CloudTest

90438: Deleting a User via sCommand causes an error Exception: java.lang.NullPointerException

The sCommand Utility failed with this null pointer, likely was because temporary tokens, created in Service.getTemporaryUserToken(), did not have usernames.

83499: SSL error when hitting Cloud-based Java 1.7 API with client certificate

This fix disables Server Name Indication (SNI) for hosts that are known to not support it.

TouchTest

90309: Android: Error "Unknown=null" locator displays in Playback if MATT (53.20) was used [requires new TouchTestDriver]

Locators with upper case letters would incorrectly return an unknown locator.

88182: Android TTW: Double click does not execute on Android tablets running OS 4.4.2 [requires new TouchTest Web app] | [requires new TouchTestDriver]

An issue with double click duration was encountered.

SOASTA 54.09 (CloudTest/TouchTest 7732.123)

Bugs Fixed

CloudTest

90372: eu-west-1 missing from EC2 install

The Amazon EC2 region, eu-west-1, was unexpectedly unavailable in the install image for 54.08. This error was limited to the 54.08 release.

89607: sCommand IndexOutOfBoundsException

In prior sCommand versions, the underlying code erroneously presumed that at least one result would be generated with each Play command. When a scenario arose where no such result per Play was in existence at runtime, this error would occur. Now, whatever result information exists at runtime (e.g. former behavior) from the instance's status object will be used if no result exists.

88610: VPC Bug for Server List

A given VPC environment was not launching and under further investigation proved to have been installed with a broken Server List. This fix resolves the underlying issue.

SOASTA 54.08 (CloudTest/TouchTest 7732.119)

Bugs Fixed

CloudTest

90348: A label on parallel repeats settings is wrong in Composition Editor

The Composition Editor, lower panel Repeat tab, Repeat Method label was incorrectly labeled as the Renew Parallel Repeats field.

90315: java.lang.NullPointerException

This null pointer exception happened in SOASTA Central.

90294: AppDynamics Error

An error occurred while adding a widget from this external data source.

90239: WebSocket Recording causes site HTTP 400 error

Authentication steps while recording the target site would cause this error.

SOASTA 54.07 (CloudTest/TouchTest 7732.107)

Bugs Fixed

CloudTest

90239: Recording causes the site to give HTTP 400 error

A WebSocket URL would produce this HTTP 400 error while recording, although if recording wasn't active no such error was produced. This fix modifies the WebSocket proxy only.

TouchTest

88182: Android TTW: Double click does not execute on Android tablets running OS 4.4.2 [requires new TouchTest Web app]

This fix augments the earlier reported fix by reducing the interval between multiple taps in a single action to account for slower devices and VMs.

SOASTA 54.06 (CloudTest/TouchTest 7732.102)

Bugs Fixed

CloudTest

90084: The time aggregate for WebSocket Open calls didn’t include TTFB, TTLB, and Bytes Received

Time aggregates such as TTFB, TTLB, and so forth, were unexpectedly omitted.

89759: Import dialog cannot store FileItem objects in the HTTP session

An object stored in the HTTP session was persisted to the Repository where it could not later be de-serialized. This fixes the error "the null attribute Type is not recognized."

89514: WebSocket Test not displaying response times or receive bytes

Response times in a WebSocket test weren't showing for for open and message sends and bytes received was blank.

88425: Maestro runs out of memory due to excess ResultEvent objects

A Java process that returned random errors would run to 100% while using CloudTest appliance.

85683: "Target Property Sets - Leading and Trailing text that was previously saved is not displayed when target is reopened"

Captured Leading Text and Trailing Text was unexpectedly omitted when the saved target was reopened.

84915: scommand java.lang.ArrayIndexOutOfBoundsException when using AverageResponseTime validation for empty Transaction

sCommand failed with an ‘scommand java.lang.ArrayIndexOutOfBoundsException when using AverageResponseTime validation for Transaction with 0.00 avg’ error when the validation= was in use if the transaction in question was empty.

TouchTest

89788: Can't scroll ListView in app [requires new TouchTestDriver]

MATT failed to instrument some classes in a package due to underlying failures in instrumenting some Google Play Services classes. This fix includes support for additional Google Play Services libraries.

88182: Android TouchTest Web: Double click does not execute on Android tablets running OS 4.4.2 [requires new TouchTest Web app]

Double click web actions unexpectedly failed on playback in Android. Now, for doubleClick (or any click w/ multiple tapCounts), TTW will reset by keeping track of scale tracker.

88606: Device Mismatch error

In a prior limited release, logging was added to better debug a device mismatch issue. Now, in addition, there is a new exception to give more details to the user on why their device was not verified. Future issues resulting from request manipulation of the type in question will now have warnings to point debuggers in the right direction.

SOASTA 54.05 (CloudTest/TouchTest 7732.84)

Bugs Fixed

CloudTest

89758: Custom Properties in Clip Editor is not shown for JA language

The Clip Editor, Custom Properties tab didn't show any content if Japanese was the language.

89757: Dependencies Tab is not showing for JA lang in Central

The Central, Dependencies tab failed to show any information if Japanese was the language.

88597: Recording Causes the site login process to timeout

This fix adds a new hidden "enabledSSLVersions" setting that can be used to enable only TLS 1.2. This fix requires that the user manually add a line to the Conductor config file using the following steps:

1. Stop the Conductor.
2. Edit ~/Library/Preferences/SOASTA/Conductor.cfg.xml.
3. Add the following line:

   ```
   <param name="enabledSSLVersions" value="TLSv1.2" />
   ```

4. Save, start Conductor again, do the recording!

89514: WebSocket Test not displaying response times or receive bytes

While running WebCocket tests he response times didn’t show for for the open and message sends. Also, the bytes received showed blank.

88304: QingCloud integration does not verify security groups

Before deploying a QingCloud grid, CloudTest will now automatically verify that ports 80 and 443 are open in the specified security group.

88266: Starting a monitor with Custom Command should fail if not using Conductor

The Custom Command for Monitoring feature unexpectedly permitted a monitor to be started on SSH, whereas a Conductor configured as a monitoring agent is required.

87882: Session Template Wizard has wrong page label allocation

The Session Template Wizard pages and navigation nodes had non-matching labels.

57674: Import of Composition failed with Null Pointer in CTLite

This was caused by some imprecise Xpath, which was picking up the "Distribution" node of a seed data user property, which has no places. The selector was changed to only apply to track distributions.

TouchTest

89539: iOS TT: After MATTing application it crashes on opening splash screen [requires new TouchTestDriver]

This fix adds signing to embedded frameworks dylib to prevent crashing with add-on swift libraries.

67522: Error creating a device cloud if the name is already taken

This error would result if a Device Cloud was given an already existing name.

SOASTA 54.04 (CloudTest/TouchTest 7732.71)

Bugs Fixed

CloudTest

Azure (IaaS) grids did not deploy in 54.03

Grids for Azure (IaaS) were not deployable while running SOASTA 54.03 builds.

86136: Can't tear down/delete non-cloud RSDBs

Local Results Service databases could neither be torn down nor deleted.

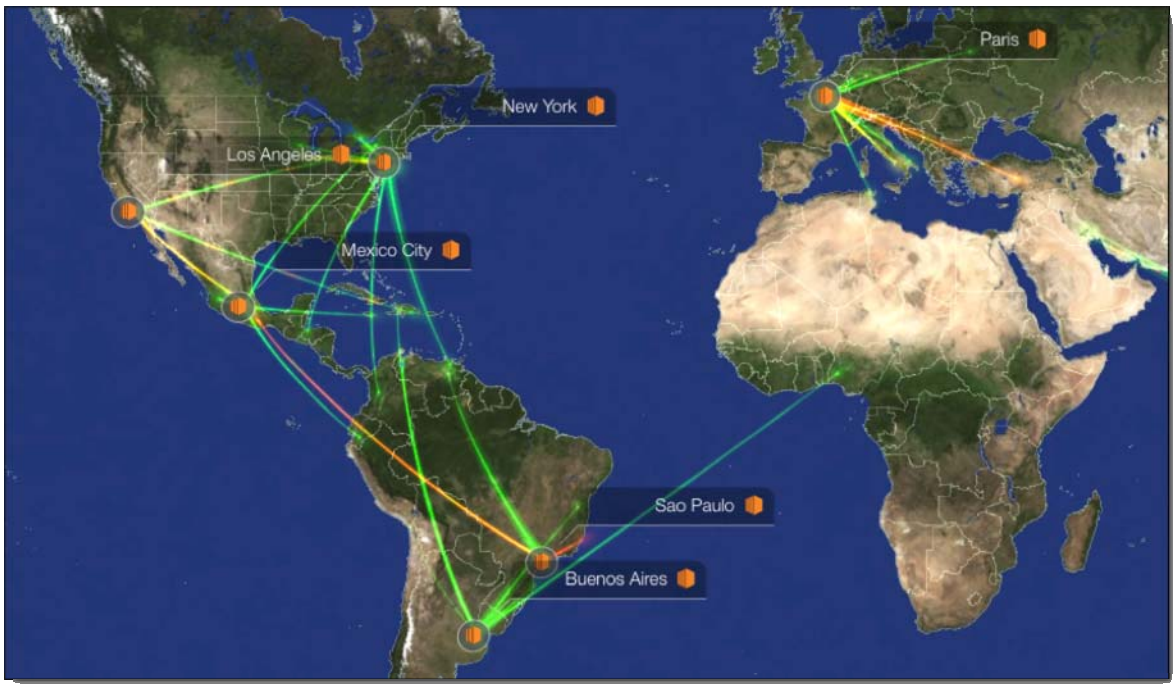
SOASTA 54.03 (CloudTest/TouchTest 7732.62)

Features

CloudTest

Global Activity

With the advent of the Globe Dashboard in this release, SOASTA is also introducing Activity Arcs; an exciting new, geo-spatial depiction of real load tests, in real time. Activity Arcs depict the flow of server data from different data centers against the target site(s).



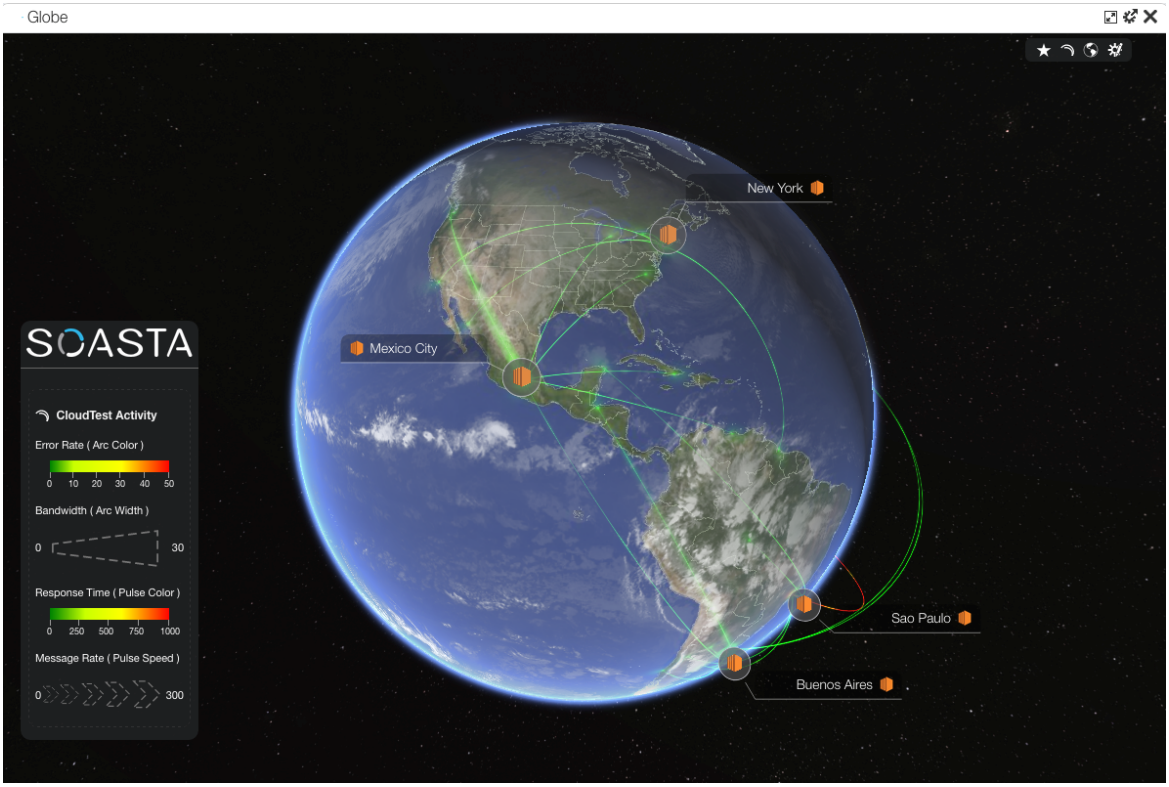
An Activity Arc depicts real-time data flow combining color (for error rate), width (for bandwidth), as well as other arc attributes including animation, gradient length, speed, height, and shape, in order to provide powerful visual reinforcement of the data flow in the test composition and in its result.

Two new System Dashboards—Globe Dashboard and the Dynamic Globe, display Activity Arcs. The Globe can also be added to new custom dashboards. Large screen displays are recommended and are the preferred vehicle for display of all SOASTA Globe Dashboards.

Globe System Dashboard

The Globe Dashboard presents the test composition's data stream in one dramatic, three-dimensional, WebGL-based global format with fly-to animation, and other Globe features readily available by drop-down settings.

The Globe System Dashboard presents the CloudTest Globe in a wide layout where it can be combined with other widgets while also functioning as a background.

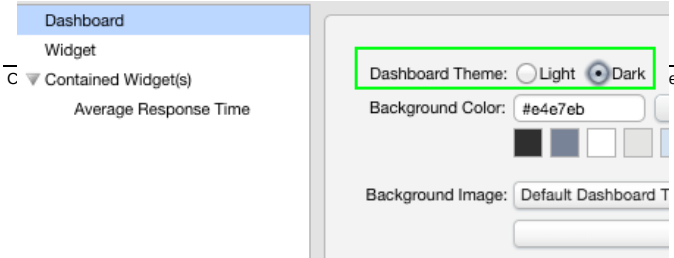


CloudTest users should note that the Globe's Settings are found in the upper right drop-down panels rather than in the Dashboard Editor lower panel.

Arc animation is enabled by default and can be disabled in the Globe's Activity Arc panel (covered in the following section).

Use the Widget-on-Widget Layout and Edge Constraints procedure to add Charts to your own custom Globe Dashboard.

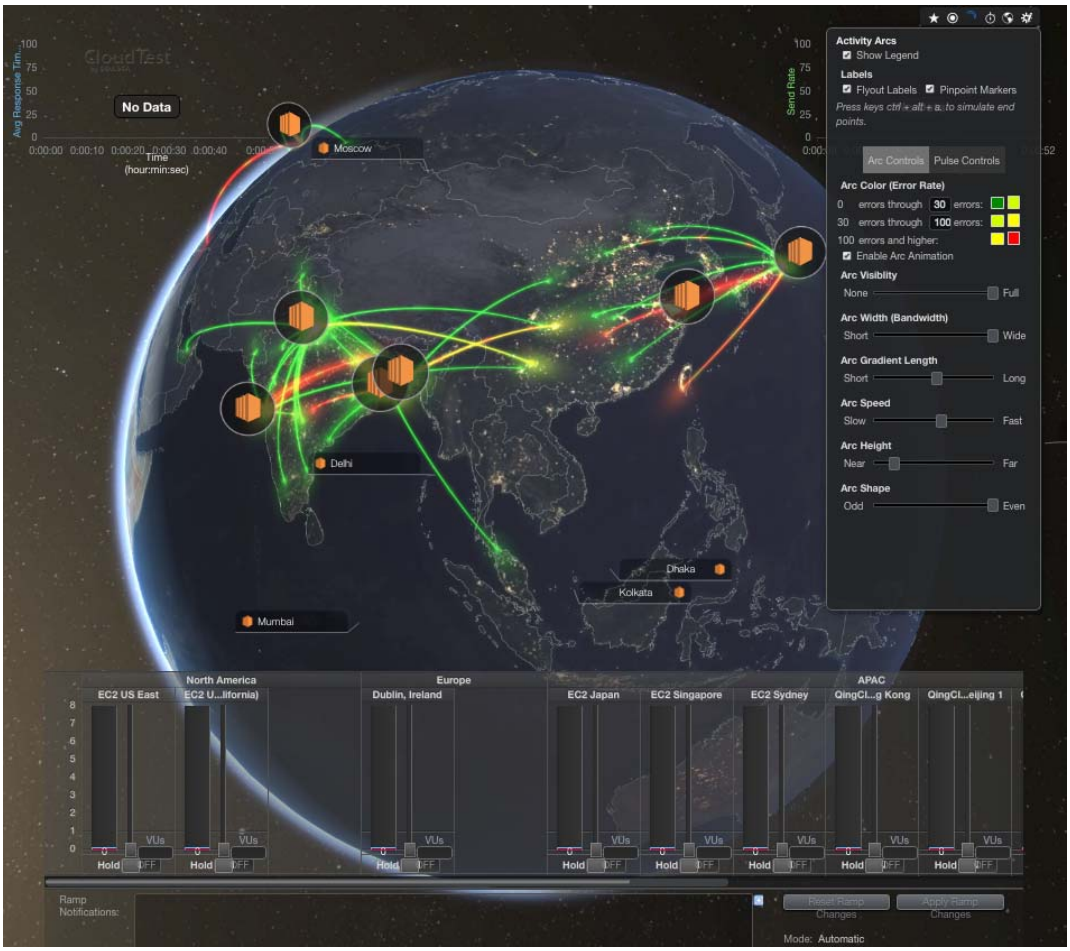
Set your custom Dashboard Theme to Dark to improve the blending between your widget-on-widget layout and the Globe's Starfield.



Dynamic Globe Dashboard

The Dynamic Globe System Dashboard combines the Globe and Dynamic Ramp Controller into an exciting new, geo-spatial depiction of real load tests, in real time.

In the Dynamic Globe Dashboard, an Activity Arc depicts the flow of data from the different data centers (e.g. cloud vendors) where load servers run against the target site. Once play is clicked in cloud-based load tests, or while reviewing results, the Globe shows an arc from any cloud-based data centers in use in the test.

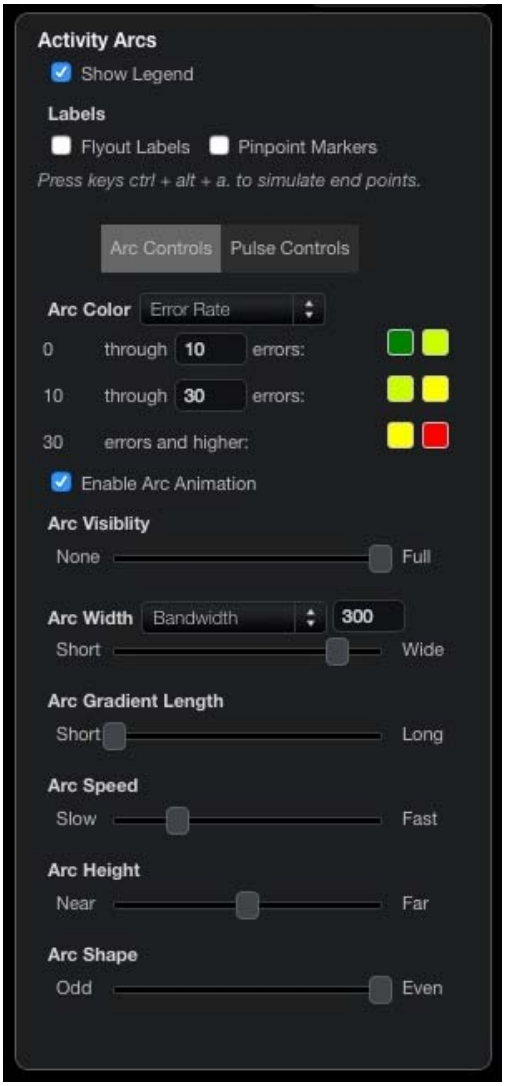


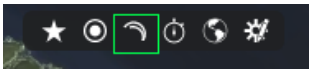
Note: In general, the Globe is designed for large displays. In the context of the new Dynamic Globe System Dashboard this is especially true. The user experience may suffer notably on smaller displays such as laptop screens since the Dynamic Ramp Controller will overlap the Globe background.

Using the Globe as its background this new System Dashboard also presents the Average Response Time and Send Rate widgets. The Dynamic Ramp Controller in use in this System Dashboard has its top charts suppressed (e.g. via the widget's lower panel settings).

Activity Arc Controls

For CloudTest, a new Activity Arcs panel appears that was not found in the prior mPulse-only version of the Globe widget. Clicking the Arc icon on the Globe toolbar drops down the panel.





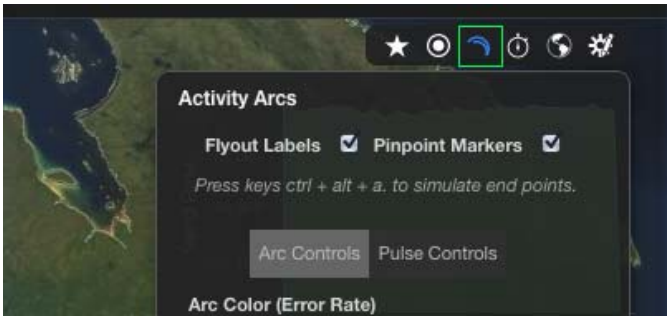
The Activity Arcs panel is divided into two main control tabs for Arc and Pulse—the Arc Controls panel displays by default. Additional settings for labels and markers appear at the top of the panel.

Labels and Markers

The Global Activity dashboard displays labels and markers that clearly identify data centers and target sites where the data flow begins and ends.

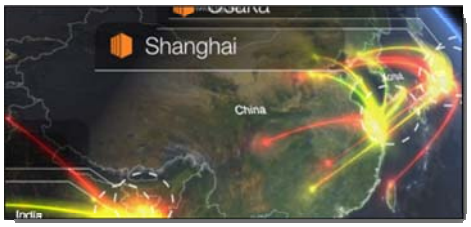
Flyout Labels

A Flyout Label is a two-line label that allows for a pair of text data fields (above and below.

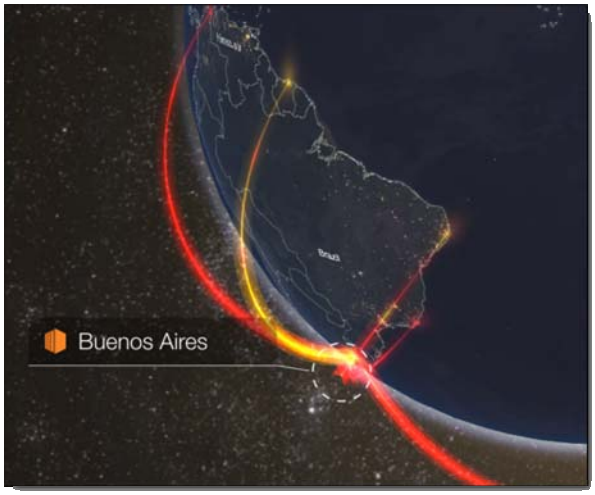


Pinpoint Markers

A Pinpoint Marker is a 3D marker shown as a billboard (e.g. facing camera) that represents an origin or terminal point of the relevant portion of the data flow (e.g. the geo location of a Data Center or other data point).



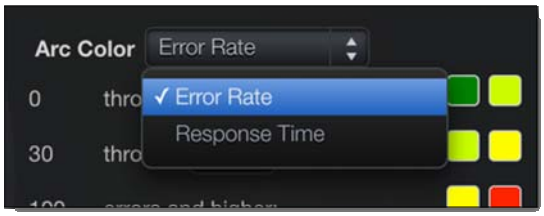
When displayed on the currently visible portion of the Globe, markers and labels appear on the Globe surface (e.g. similarly to how they display while in 2D Mercator view).



As the Globe rotates, the markers and labels are presented as if floating in space.

Arc Color (Error Rate)

The error basis for Arc Color can be changed from Error Rate to



The default Arc Color settings can be modified in custom dashboards by adjusting the maximum value of the error ranges shown below.

Arc Animation is a subtle pulse effect on the arc layer (solid component) that is noticeable when the pulses layer is off. The **Enable Arc Animation** box is checked by default. Disable if you do not wish to see arc animation at all.

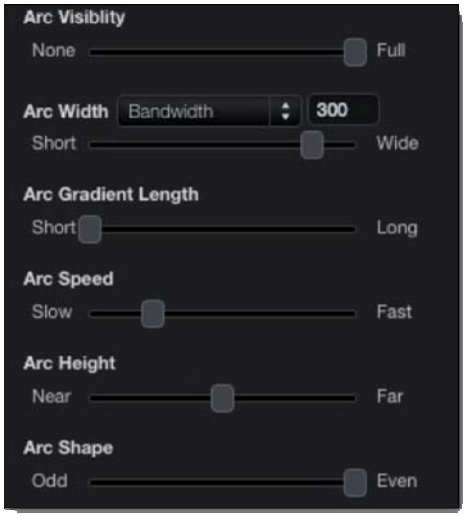
Arc Control sliders

Use the following Arc Control sliders to customize your arcs:

Arc Visibility – Use this slider to control the arc's opacity

Arc Width (Bandwidth) – Use this slider to control the arc's width with respect to bandwidth in the test composition

Arc Gradient Length – Use this slider to adjust the arc's "squircle" length



Arc Speed – Use this slider to control the arc's growth on creation and following subtle pulses along its length.

Arc Height – Use this slider to control arc height (e.g. the height in relation to the 3D globe or 2D map view

Arc Shape – Use this slider to control arc shape (e.g. odd or even)

Pulse Controls

Click the Pulse Controls panel for additional settings. Pulse controls allow the user to experiment with different pulse frequencies, offsets, speeds (based on message rate), random variance and length. Pulses account for a great deal of the effects along the arc line, from a pure linear effect, to smaller pulses.

Pulse Color (Average Message Response)

The default pulse color settings shown below can be modified (just as in other Globe settings).

Pulse Control sliders

Pulse Control sliders are factor sliders, which is to say that they pertain to the message rate attached to pulse speed. The relative speed differences are scaled.

Use the following Pulse Control sliders to customize your arcs:

Pulse Visibility – Use this slider to control the pulse's opacity

Pulse Width (Bandwidth) – Use this slider to control the pulse's width

Pulse Length – Use this slider to control the pulse's "squircle" length. The slider is a factor the relative speed differences are just scaled.

Pulse Speed – Use this slider to control the pulse's speed.

Pulse Frequency – Use this slider to control how frequently the pulse occurs.

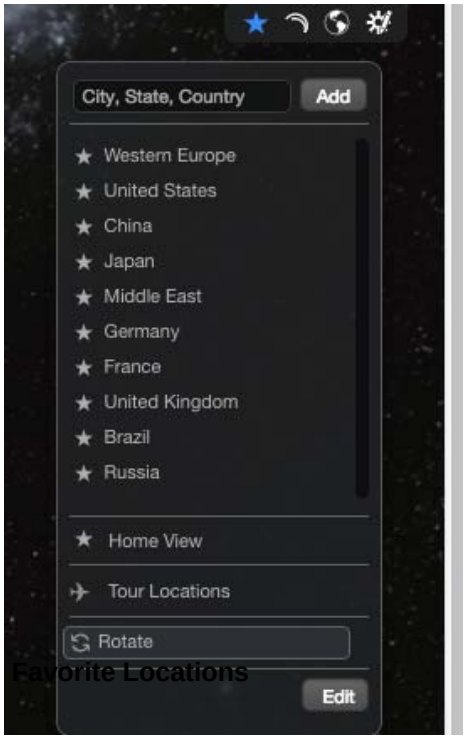
The **Enable Pulse Animation** box is checked by default. Disable if you do not wish to see arc animation.

Other CloudTest Globe Settings

In addition to the **Activity Arcs** panel (covered in the **Dynamic Globe Dashboard** section below), CloudTest shares additional settings with the Globe Dashboard found in mPulse. The Globe toolbar panels are (from left to right) Favorite Locations, Activity Arcs, Globe Style, and General Settings.

Favorite Locations

Click the Star icon to access location settings in the Location drop-down.



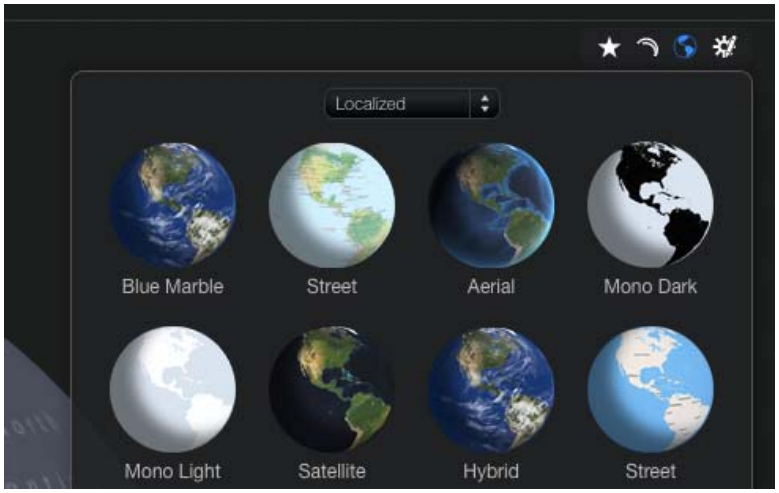
Favorite Locations

- Click any listed location to fly-to its given location on the Globe.
- To add a new location, enter it into the entry field and click the Add.
- Click any default or custom location to fly to (out if you're already zoomed into a location, in if you're at satellite view) to the desired location. The default locations are Mountain View, CA; New York, NY; London, UK; Paris, France; Sydney, Australia; Singapore, and Hong Kong.
- Enter an integer in seconds to control the fly-to sequence's cycle speed.
- Click Home View to return to the location set as "Home View" (while in Edit mode use "Set as Home View" to make the current globe view home)
- To tour all of the locations, click the new Tour Locations command in the Locations drop-down. When you do so, the locations will load. Click the command a second time to begin the tour.

To rotate the globe at a steady rate, click Rotate. The globe background rotates along with the globe itself for increased realism.

Globe Style

Globe Style settings are found in the Globe dropdown. Choose from among the Base Imagery **globes** shown in the **Globe Style** drop-down.

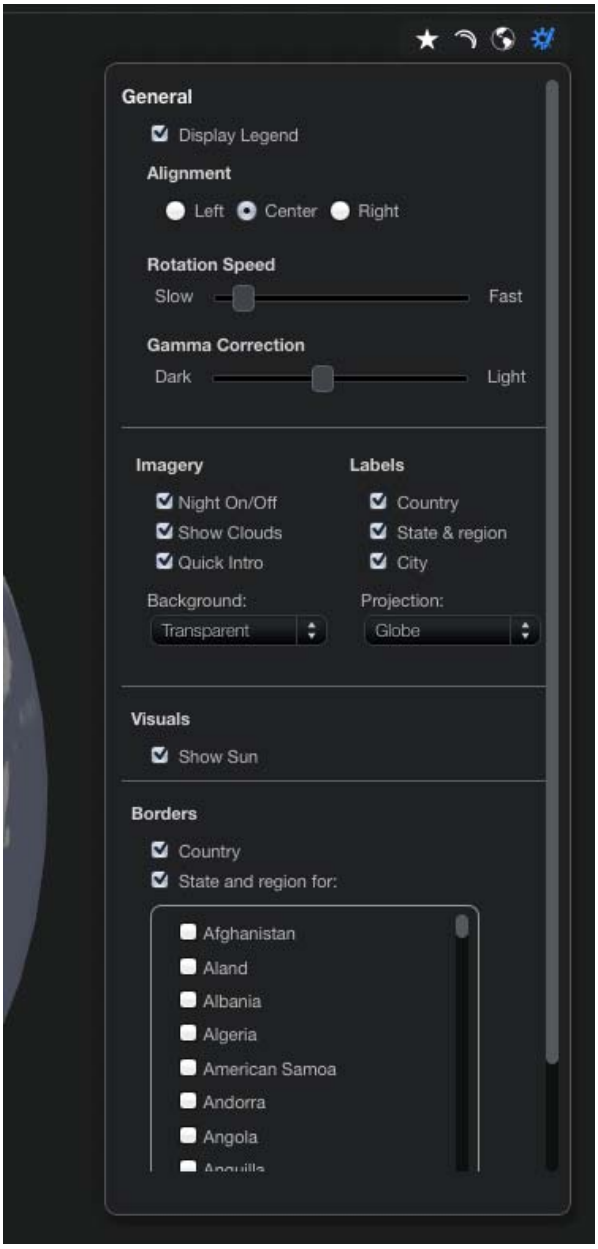


Popular choices include:

- **Blue Marble** (the classic global nickname for our planet displays Earth as if from a satellite or a traveling spacecraft)
- **Street** (Shows the **globe** with political boundaries and other features including street plotting
- **Aerial** (An aerial perspective **globe**)
- **Mono Dark** (mPulse Dark shows darkened land masses)
- **Mono Light** (mPulse Light shows white land masses)
- Other available views include Satellite, Hybrid, (alternate) Street, Terrain, Storm, and Mongo Terrain

General Settings

General Settings are found under the Gear icon.



Display Legend — Check/uncheck the Display Legend to toggle the legend on the Globe surface

Alignment — Set widget alignment to left, right, or center by selecting a radio button.

Rotation Speed — Use the rotation speed to control the rate at which the globe spins.

Gamma Correction — Use gamma correction to control the dark to light range of the Globe display itself. This setting is useful when your work environment is darker or lighter than the average setting, such as is common in corporate "NOCs" (i.e. network operation centers that require low lighting levels).

Imagery — Use Imagery settings to control night (on/off), toggle cloud animations, or to use a quicker Intro sequence (on Globe launch).

Labels — Use Labels to toggle place name labels (check/uncheck). City labels are not shown by default. Check Show city labels if you prefer to show them. Additional labels will display on zoom.

Background — Select a background for the globe itself. Choose from among Starfield (shows a black background in a field of stars), White, Black (with no stars), and Transparent (for combining with other charts and interpolating data).

Projection — Sets the base imagery for the globe itself. Use Projection to select between 3D Globe view and 2D Columbus (e.g. "flat earth" map projection) modes. Projection permits the user to view al' of the Earth as if projected onto a flat surface as is common on two-dimensional maps.

Visuals — Check Show Sun to add our local star to the Globe visual background.

Borders — Check Show country borders or State and region to enable border display at those levels. Note that state and region borders are only applicable to one country at a time. Check any Country in the list to enable it. Check State and region for and then check the box for one or more countries to show internal political borders such as states or provinces.

CloudTest Activity Legend

In CloudTest, the Globe Legend presents CloudTest Activity, including visual cues for:

- Error Rate (Arc Color)
- Bandwidth (Arc Width)
- Response Time (Pulse Color
- Message Rate (Pulse Speed).

The defaults shown in the CloudTest Activity Legend can be adjusted in the Activity Arcs panel (detailed below) in any custom dashboard.

Globe Filtering

The Global Activity System Dashboard, as well as the Globe widget, is fully filterable in the manner of all other SOASTA dashboards and widgets. Use the default Filter controls (shown in the breadcrumb along the dashboard top) to apply time windows, or, add more filters where necessary in custom dashboards.

The Cloud Test, Globe widget features the same transparent control panel found in its mPulse cousin. For Globe-specific settings, these controls present easy, inline control, and preclude the necessity of lower-panel settings. The legend appears in the lower left and controls are in the top-right corner.

In its default state, the Globe spins, clearly and accurately showing the current solar terminator point between night and day as well as clearly representing the twilight zone, or moving line, between the two. Click to stop the globe's rotation and use gestures to zoom. Alternately, click one of the fly-to locations on the Legend to move to it.

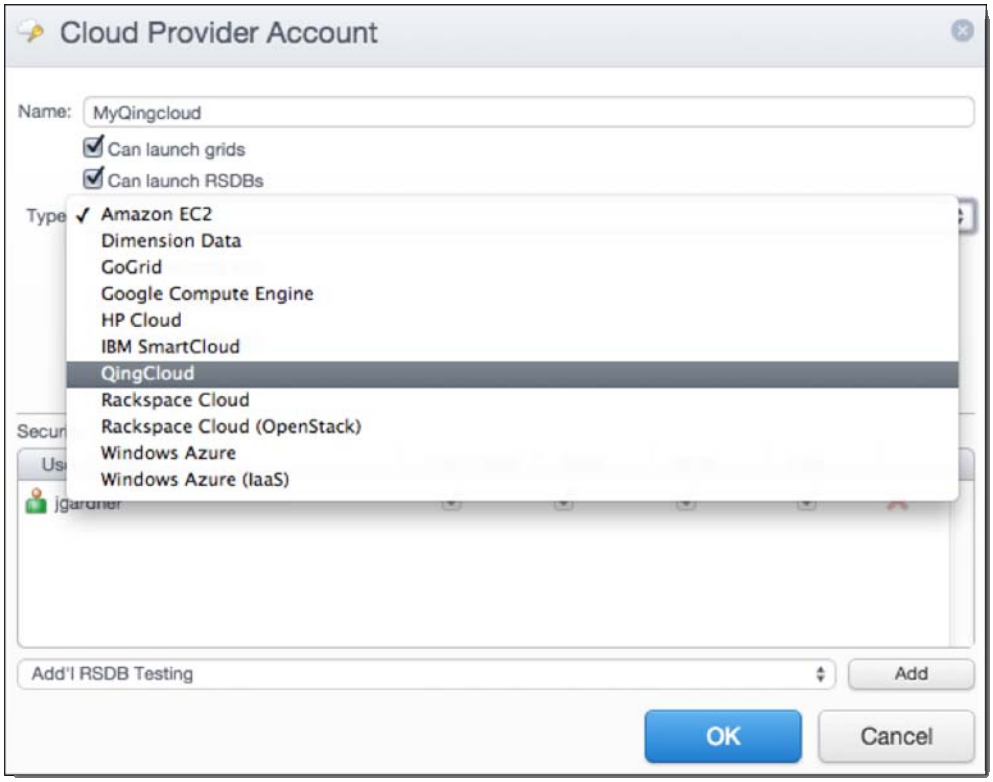
Cloud Provider Account Support for QingCloud

Users can now create Cloud Provider Accounts and launch Grids for the QingCloud vendor. QingCloud provides data centers in the U.S., Africa, Asia Pacific, and Europe.

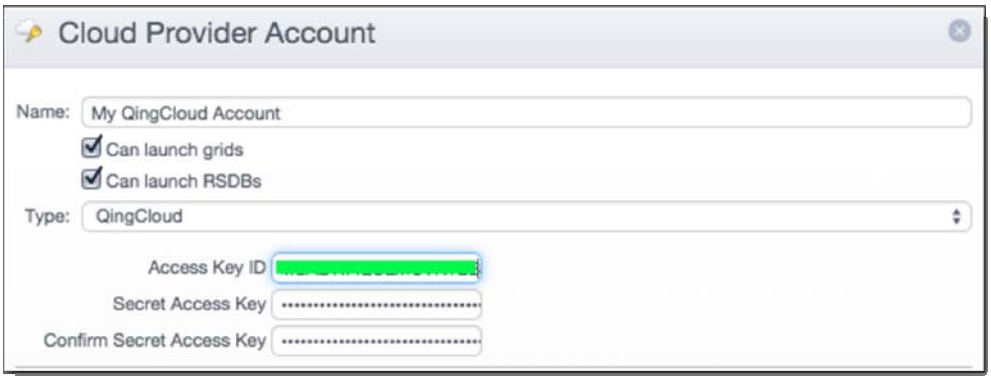
Setup QingCloud as a Cloud Provider

Use the following steps to enter your valid QingCloud credentials as a CloudTest Pro Cloud Provider Account.

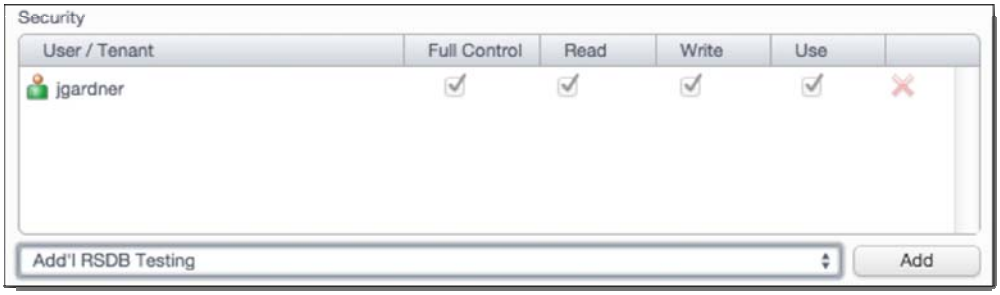
1. Select Central > Cloud Provider Accounts and then click New to launch the Cloud Provider Account dialog box.
2. Enter a name for the new cloud provider account. This name is used in locations and also appears in the Cloud Provider Account drop-down in the Grid Manager.
3. Change the “Type” drop-down to “QingCloud”.



4. Enter the QingCloud Access Key ID
5. Enter the Secret Access Key and then enter it in the Confirm Secret Access Key field a second time.



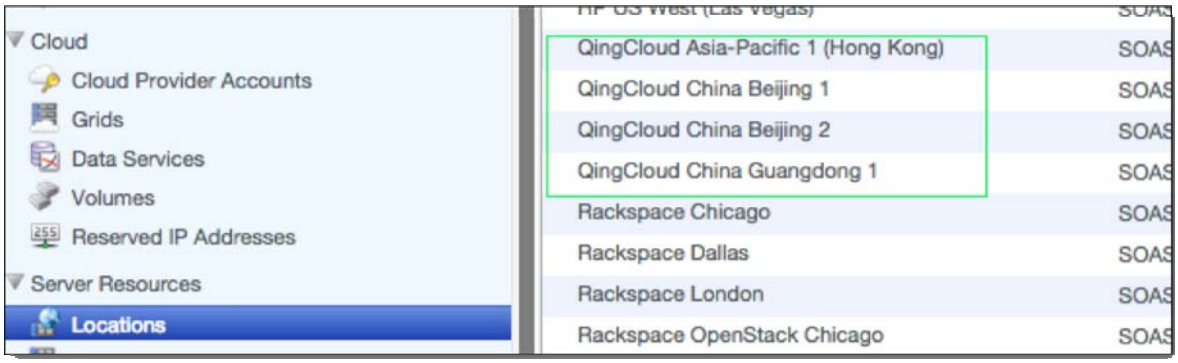
6. Optionally, configure an access control list in the Cloud Provider Account box in CloudTest. Refer to Cloud Provider Accounts for additional Access Control List steps.



7. Click OK to complete configuration of this Cloud Provider Account.

The completed item appears in the Cloud Provider Accounts list in Central.

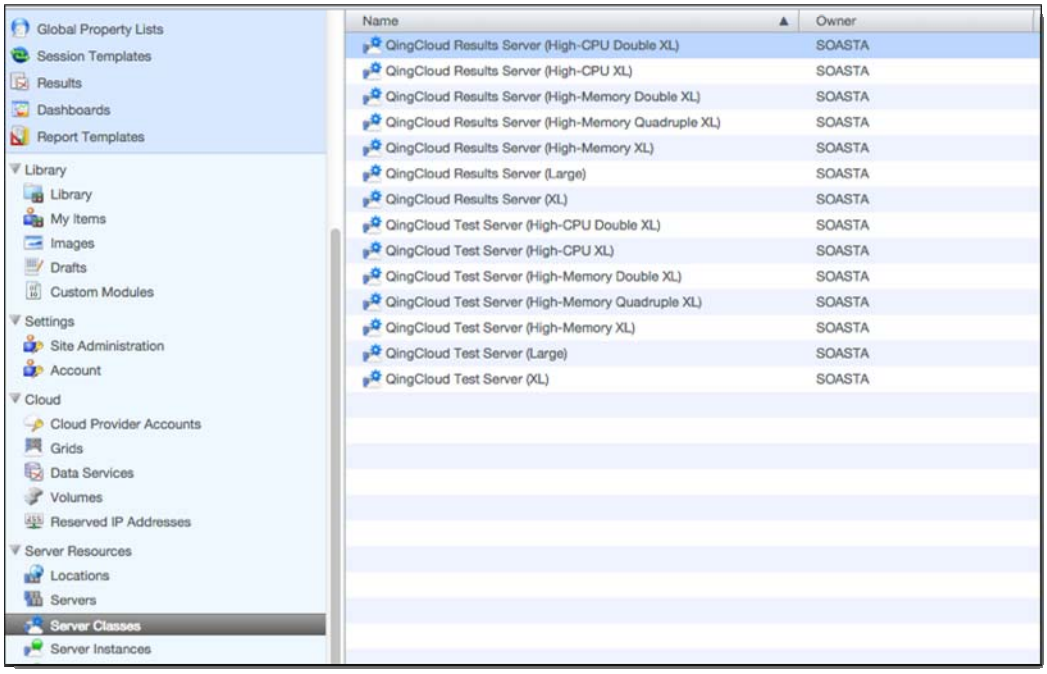
When the Cloud Provider Account is saved, a new set of locations for QingCloud will be automatically created, if they do not already exist.



These locations must be specified during Grid Manager configuration of grids (as described below).

For more information about Locations, refer to Using Locations.

Additionally, CloudTest creates all of the Server Classes supported by the QingCloud vendor.



QingCloud Server Instance Types

The following SOASTA server instance types map to the following QingCloud configurations.

SOASTA Instance Type	QingCloud Configuration
LARGE	8 GB total RAM and 2 CPU cores
EXTRA_LARGE	16 GB total RAM and 4 CPU cores
HIGH_MEMORY_EXTRA_LARGE	16 GB of RAM and 2 CPU cores
HIGH_MEMORY_DOUBLE_EXTRA_LARGE	32 GB of RAM and 4 CPU cores
HIGH_MEMORY_QUADRUPLE_EXTRA_LARGE	64 GB of RAM and 8 CPU cores
HIGH_CPU_EXTRA_LARGE	8 GB of RAM and 8 CPU cores
HIGH_CPU_DOUBLE_EXTRA_LARGE	16 GB of RAM and 8 CPU cores

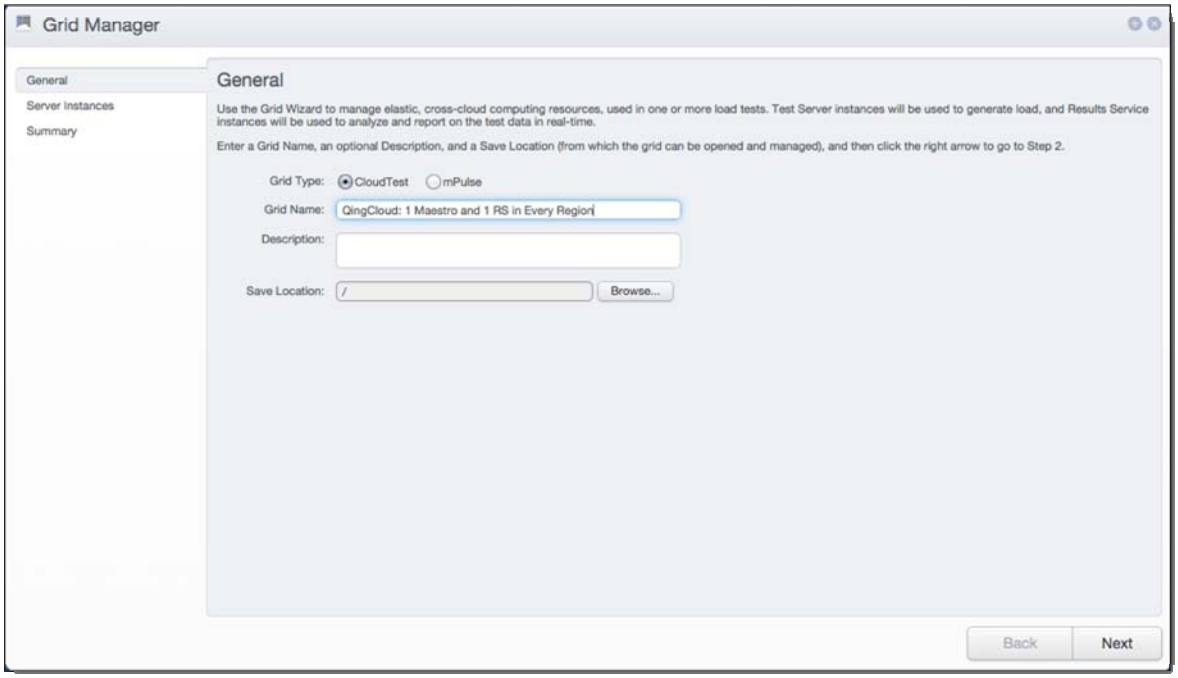
These Server Instance Types can be used in either Results Server or Test Server instances.

Launching Test Servers using QingCloud

Once a QingCloud Provider Account has been created for use with CloudTest, you are ready to create a grid that will provision servers via that cloud vendor.

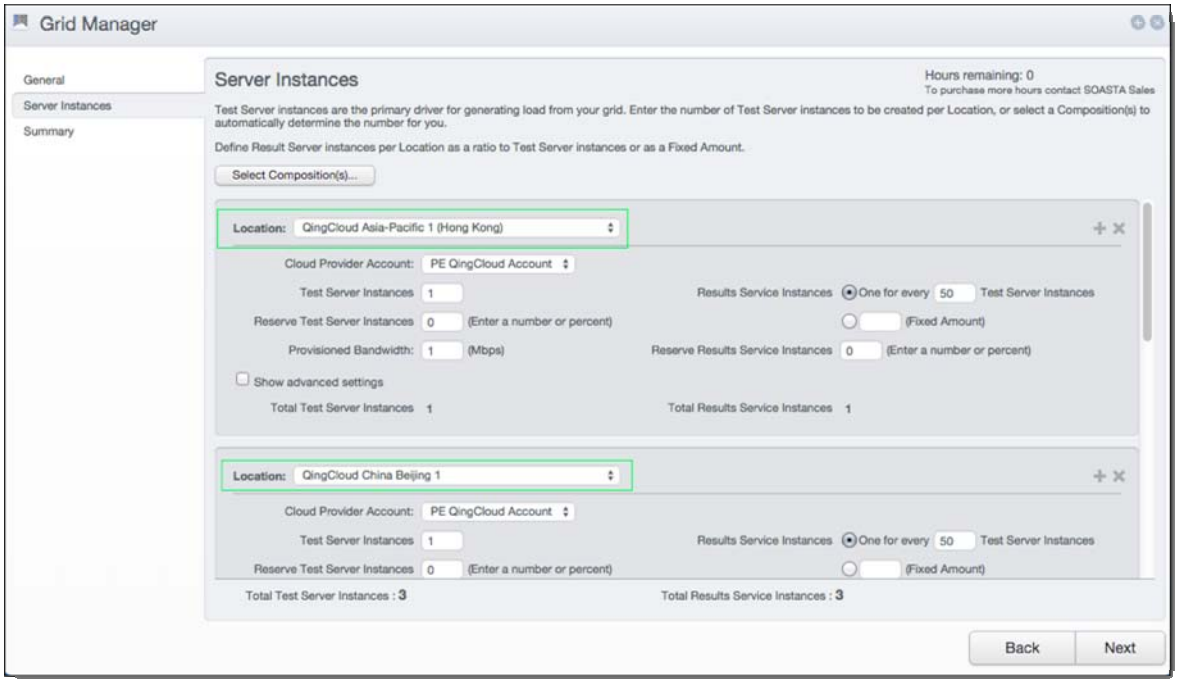
Creating a Grid using QingCloud

1. Select Central > Grids and then click New. The Grid Manager appears with Step 1 General displayed.

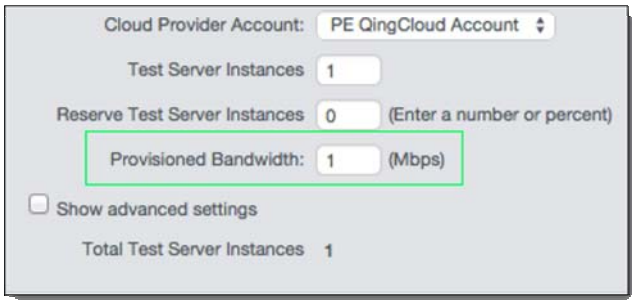


2. Select the SOASTA product to which the grid pertains, which in this case is CloudTest.
3. Enter a Grid Name, and optionally, enter a description and a repository location for the new grid, and then click the right arrow.

The Step 2 Server Instances page appears.

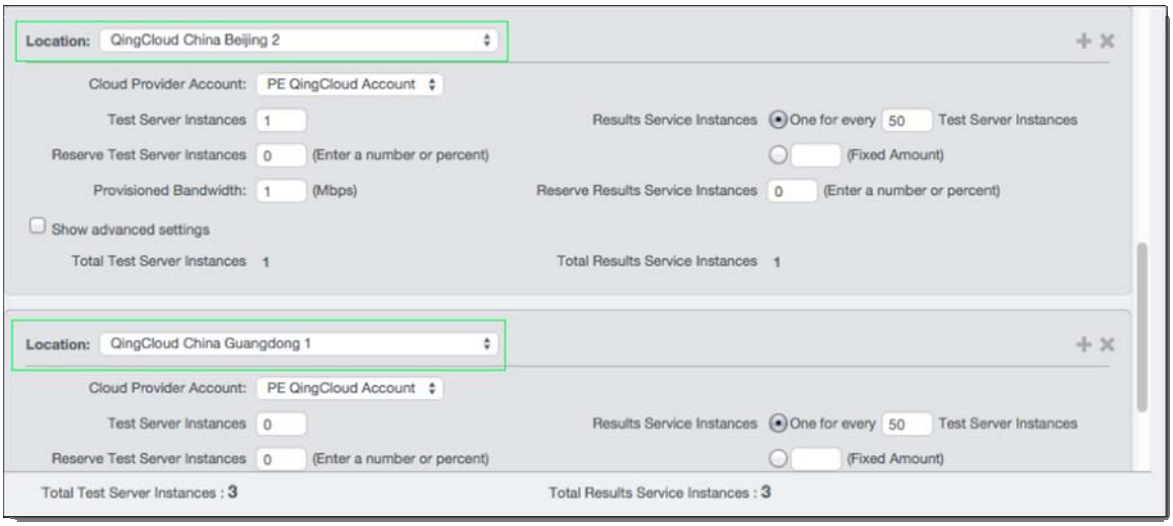


Note: Every QingCloud server is given a bandwidth limit by the user. Total bandwidth across the given QingCloud account is capped by QingCloud. The Default cap is 1 Gbps (e.g. 8,000 Mbps). Bandwidth is specified in the CloudTest Grid Manager, Server Instances page, Provisioned Bandwidth setting.



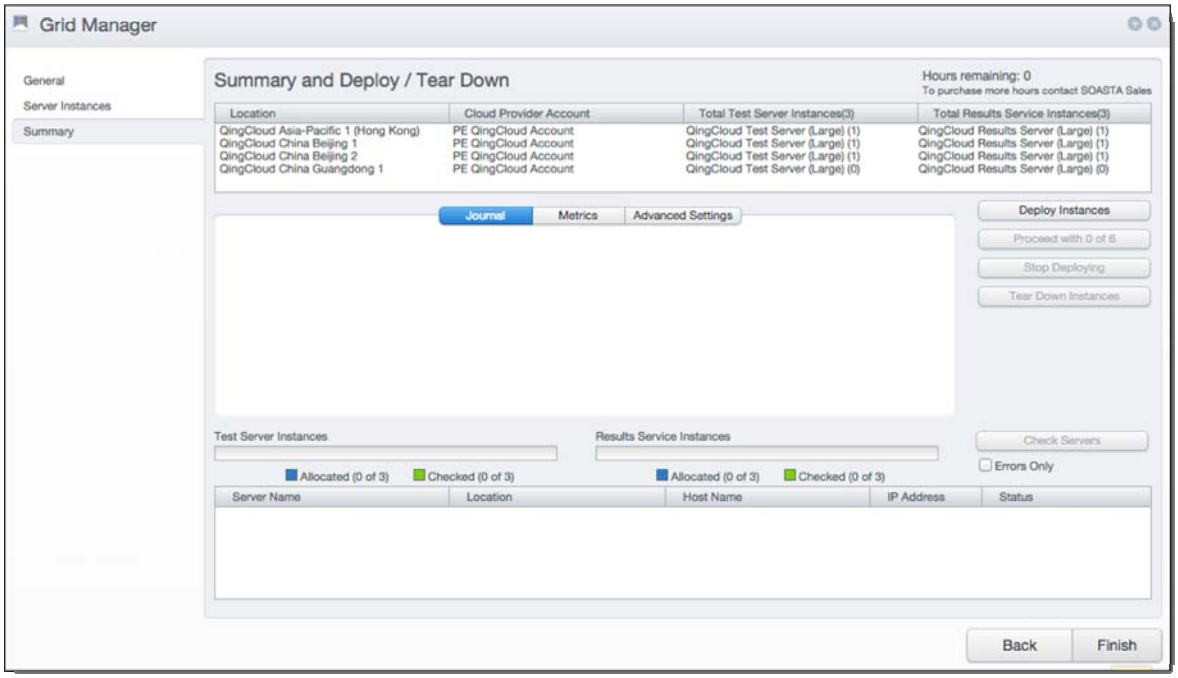
4. Change the “Location” drop-down to one of defined QingCloud locations. For example, *QingCloud Asia-Pacific 1 (Hong Kong)* (shown in the first location above) or *QingCloud China Beijing 1* (shown in the second location above).

5. Optionally, specify additional locations such as the *QingCloud China Quangdong 1* location (or a second Beijing location that uses a different combination of results and test servers.



6. Specify the number of Test Server instances, and then optionally, define Results Server Instances. For most cases, the default “One for every 50 Test Server” instances” is acceptable for result servers.
7. If you wish to combine the QingCloud servers from one location with servers from another location (or even with other cloud providers), click the Add a Location box and make the appropriate selection(s). Otherwise, click the right arrow icon to proceed.

The Step 3 Summary and Deploy Tear Down page appears. Click the “Deploy Instances” button to begin launching servers.



Note: CloudTest Pro users may see an additional Grid Monitor Database field for those configurations where more than one Results Database is available. For more about using and launching grids, refer to Managing Grids.

Custom Commands for Monitoring

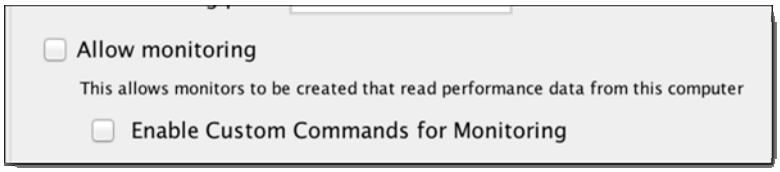
In prior releases Custom Commands were specific to system resources. Now, Custom Commands can be used to create Custom Monitors in supported environments except Windows. Windows support will be provided in the near future.

Custom Command monitors are entered as an inline process call (entered into the provided Monitors box, text entry field) but can also refer to an external Shell Script accessible within the given environment.

This enhancement provides the ability to monitor runtime metrics (e.g. metrics whose value is not known ahead of time).

TIP: Users should note that the output of the "script" in question must be a real number.

Custom Command monitors require an agent, SOASTA Conductor, be in use as part of command configuration. This configuration is done using the existing Monitor UI, which now includes the Custom Command field, as well as a new Enable Custom Commands for Monitoring box is found in the SOASTA Conductor field, which appears in the Conductor Capabilities section under Allow Monitoring.

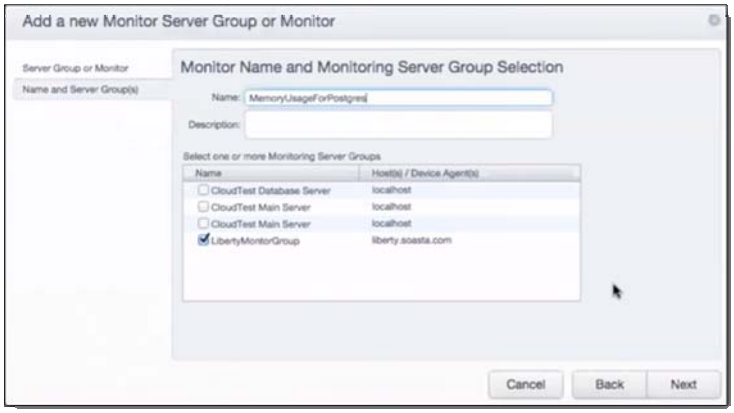


Both the Allow monitoring box, and the Enable Custom Commands for Monitoring opt-in box must be checked for subsequent monitor setup to succeed.

Once the opt-in boxes in the relevant SOASTA Conductor are checked, the remaining portion of the Monitor configuration follows the same workflow found in the setup of SOASTA-provided monitors.

Creating a Custom Command Monitor

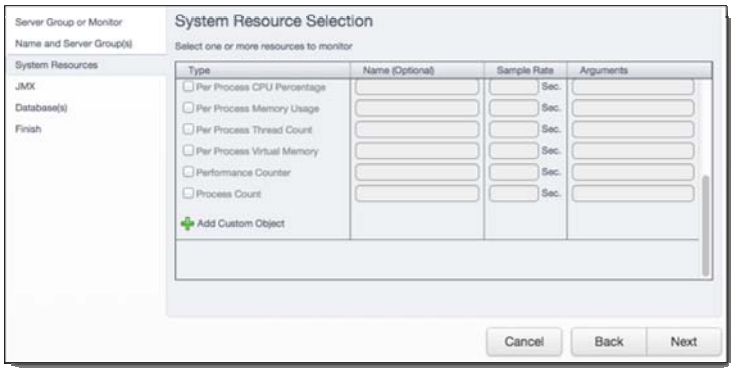
1. Create a new monitor using Central > Monitors > New.
2. In the Server Group or Monitor page, give the new monitor a name.
3. Ensure that the new monitor is associated with a Monitor Server Group setup for the host that will be monitored (shown below using the *LibertyMonitorGroup*).



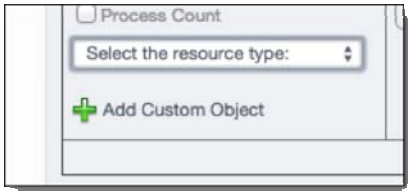
Additionally, ensure that the Monitor Server Group's Connection Type has been set to the Conductor in use for the given host (e.g. as opposed to SSH).

If you're not yet familiar with CloudTest's extensive monitoring capabilities, refer to Creating Monitor Server Groups and Creating a Monitor before proceeding.

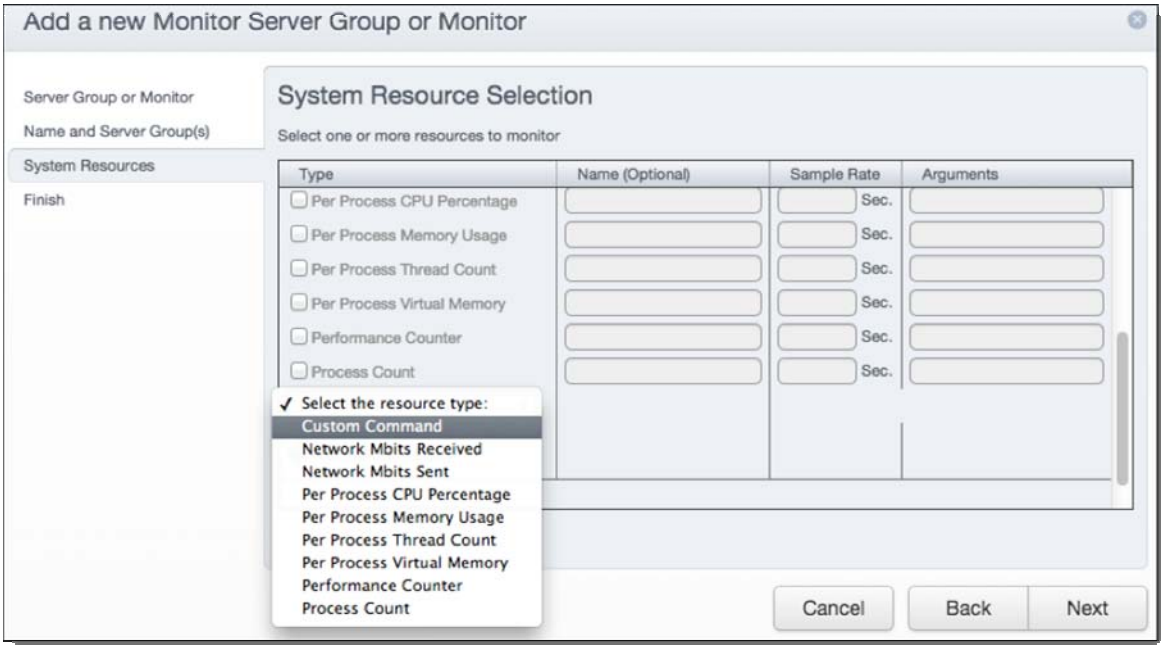
4. On the System Resources page, scroll down and click Add Custom Object (the green Plus icon) and then select Custom Command from the drop-down.



5. In the "Select resource type" dial that appears, select Custom Command.



6. In the Add a new Monitor Server Group or Monitor, System Resources page, check the Custom Command box in the Type column.



7. In the Name column, enter a name to use for the monitor. For example, *Shared DB Memory-PostgreSQL*.

TIP: Although this name is optional, it will appear on the widget title bar in any dashboard where the monitor is in display, so SOASTA recommends that each Custom Monitor have a unique name to distinguish its purpose and the information being tracked at runtime.

8. Next, create the external shell script to use on the machine to monitor.

   For example, create a shell script called `apache_shared_mem`. This script will get the sum of shared memory for apache processes on the given machine.

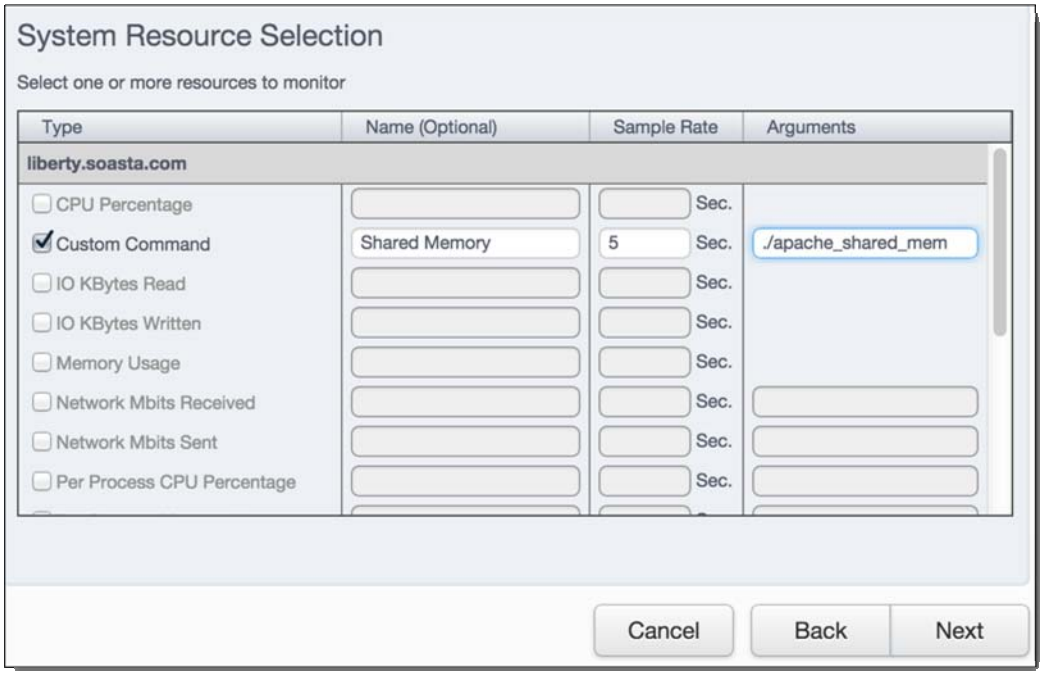
   ```
   #!/bin/bash
   top -b -n 1 | grep httpd | awk '{sum+=print $7} END {print sum}'
   ```

TIP: You can also enter your script inline in the System Resource Selection page (shown above) but SOASTA recommends doing so only for very basic scripts (e.g. usually ones that can be viewed in their entirety in the Arguments columns).

9. Change the script's permissions to make it executable. For example:

   ```
   chmod a+x apache_shared_mem
   ```

10. Enter the call to the script Monitor wizard's System Resource Selection. Note that the "`./`" preceding the script's name is required.



11. Complete the monitor creation.
12. At runtime, CloudTest will utilize a number returned from the given path.
13. Click Next and then complete the creation of the Custom Monitor.

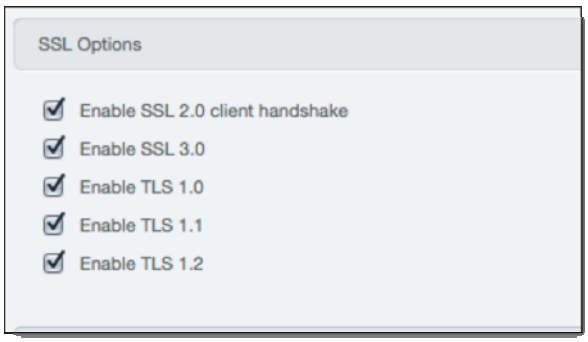
The Name (Optional) value appears on the Monitor dashboard (as noted above).

Enhancements

CloudTest

Support for Transport Layer Security (TLS) 1.1 and 1.2

This release adds support for Transport Layer Security (TLS) versions 1.1 and 1.2 to the list of target-based security settings for HTTP, WSDL, and WebSocket targets.



TLS-related settings are found in the Target Editor, SSL Options section for the given target and are enabled by default in all target type for which support is provided.

Support for Server Name Indication (SNI)

This release adds support for testing sites that use the Server Name Indication (SNI) standard. SNI is an extension to the TLS computer networking protocol.

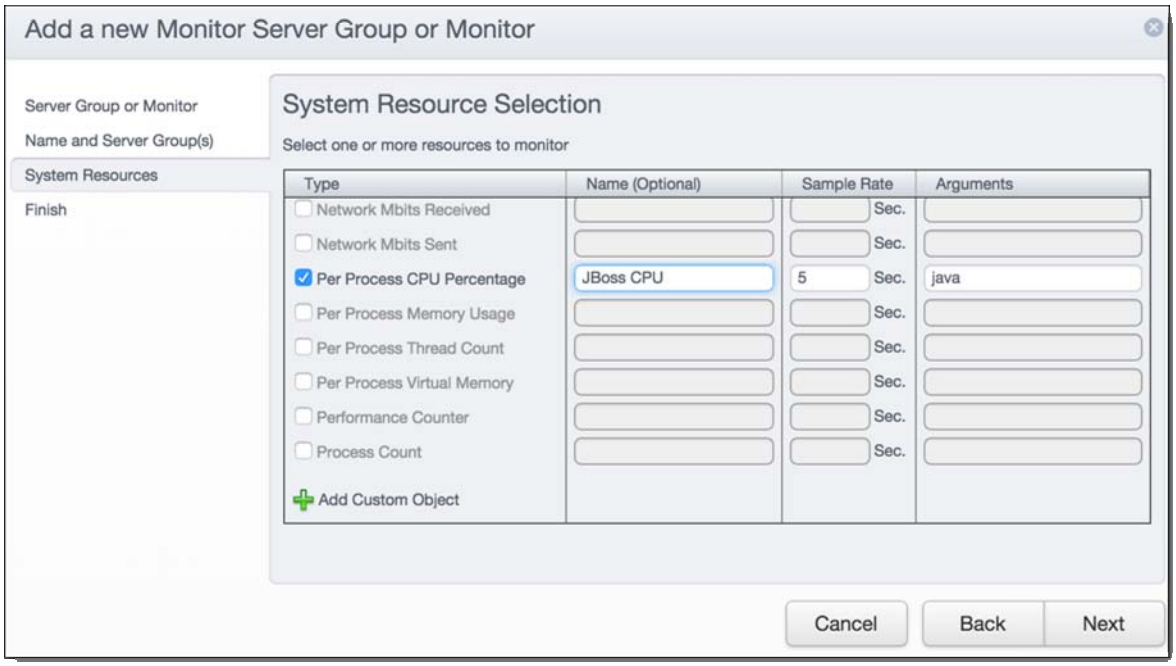
Java Custom Module Improvements

The Java Custom Module engine now supports JAR files built using Java 7 and earlier. In previous releases, the engine supported only Java 6 and earlier.

Metric Labeling in Monitors

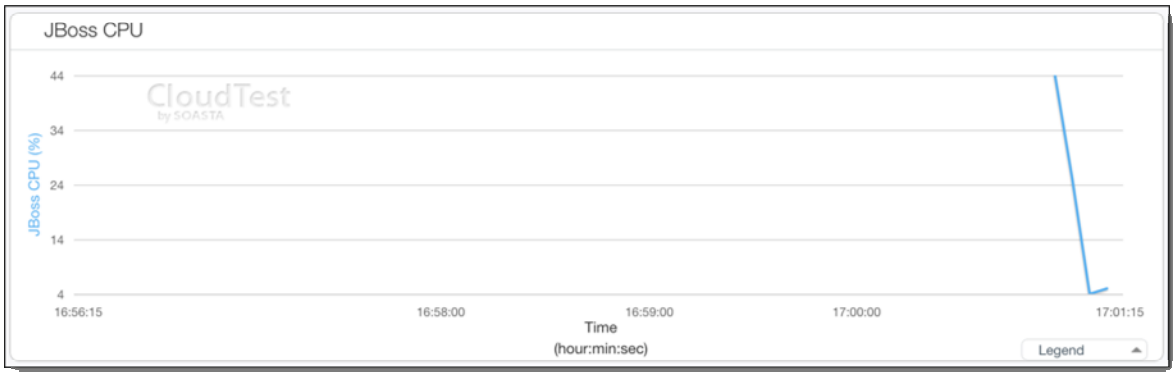
Users can now assign custom names to CloudTest's out-of-the-box metrics via the System Resources Selection page of the monitor wizard.

- To label an out-of-the-box metric, check its box and type the metric label into the Name (Optional) field.



- If you are configuring a new monitor, also enter the Sample Rate and Arguments to use.

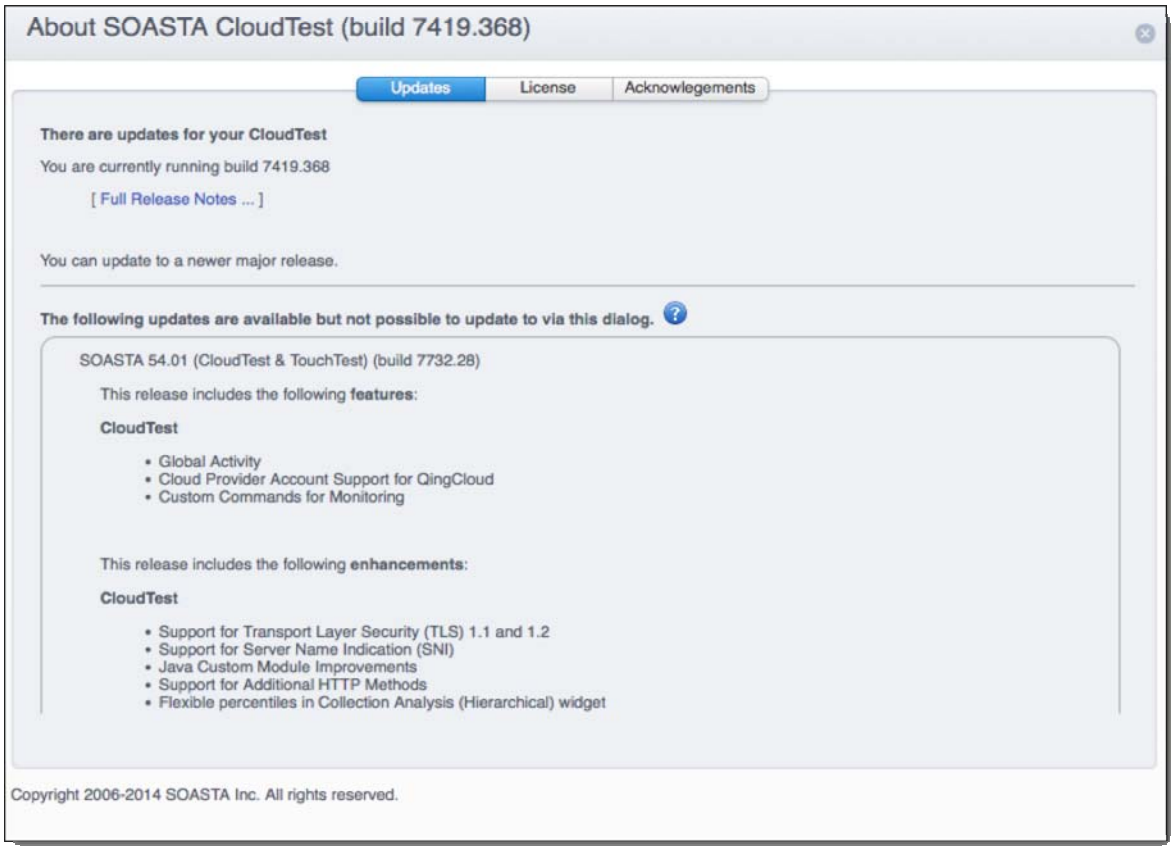
The new metric label is used in the Widget Title bar.



Updating CloudTest Lite (Non-Automated Build Upgrades)

Changes to the underlying CloudTest Lite Virtual Machine (VM) in SOASTA 54 go beyond those found in previous CloudTest Lite upgrades. Unfortunately, due to these changes, the About box upgrade process will not work, and the following manual upgrade steps are required to upgrade.

Note: This one-time, non-automated upgrade path is relatively straightforward for both Mac OS X and Windows users.



Download and Install the SOASTA 54 version of CloudTest Lite

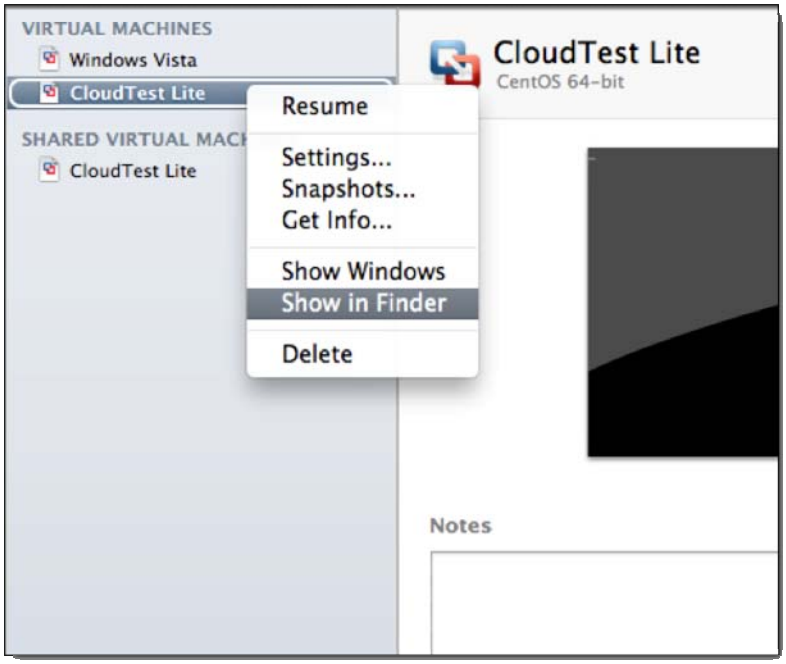
The initial steps require the user to return to the SOASTA web site to re-initiate the free download.

1. Shut down your current CloudTest Lite virtual machine, if it is running.
2. Download the latest CloudTest Lite VMware image here.
3. Unzip the file, but **do not** open the extracted VM. Note the folder where you unarchived CloudTest Lite.zip for use in the subsequent steps.

From here, follow the additional steps specific to your OS version.

Upgrade to CloudTest Lite 54 on Mac OS X

The following additional steps are performed after un-zipping the new CloudTest Lite (CTL) 54 VM. Before beginning, verify your current CTL VMs location by selecting it in VMWare's Virtual Machines Library list, and right clicking to use Show In Finder.



Note: The `Virtual Machines.localized` directory is only present if your VMs are in their default location. Omit that folder if your CTL VM is in a different location.

1. Once your CTL VM is located, open a new Terminal window on your Mac OS X desktop.
2. Change into the CloudTest Lite VM package folder:

- For the default location, enter the following command (e.g. by substituting the values in brackets):

```
cd "/Users/[UserName]/Documents/Virtual
Machines.localized/CloudTest Lite.vmwarevm"
```

- If your VM is in another location use:

```
cd ~/[Custom Location folder]/CloudTest\ Lite.vmwarevm/
```

3. Next, copy the data disk from the old VM to the new one.

- For example, if the default location that uses `Virtual Machines.localized` is in use, then this can be done by entering the following command in:

```
cp Virtual\ Disk\ 2* ~/Downloads/CloudTest\ Lite\ 2.vmwarevm/
```

- If both VMs are in the same folder, then the newly unarchived VM is named "CloudTest Lite 2.vmwarevm." In which case, use the following Terminal command:

```
cp -a Virtual\ Disk\ 2* ../CloudTest\ Lite\ 2.vmwarevm/
```

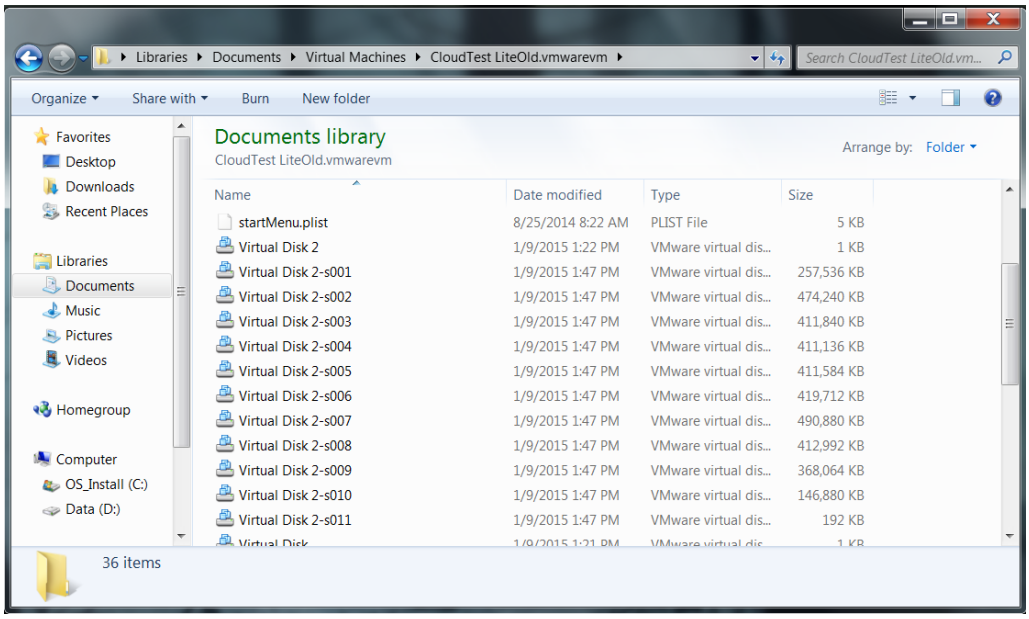
After completing the above steps, start the CloudTest Lite 54 VM.

Upgrade to CloudTest Lite 54 on Windows

The following additional steps are performed after installing the new CloudTest Lite 54 VM.

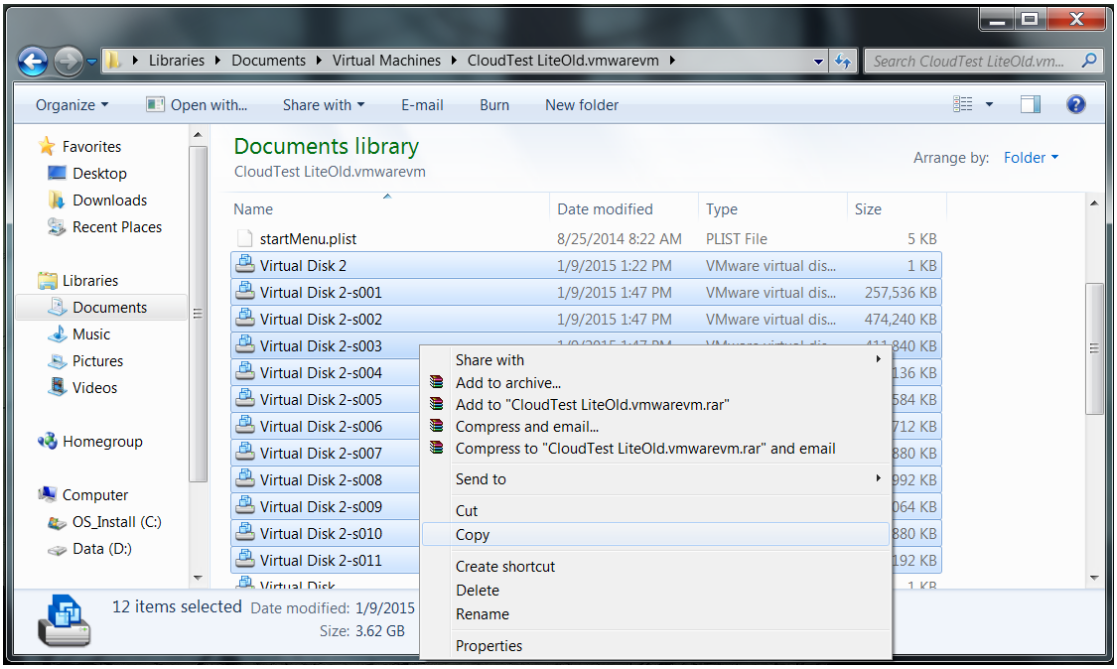
1. Using the file manager find the directory where the VMs live and go into the first (**old**) CloudTest Lite directory. Unless your VMWare installation folder is non-standard, this should be:

```
\Users\User\My Documents\Virtual Machines\CloudTest
LiteOld.vmwarevm
```



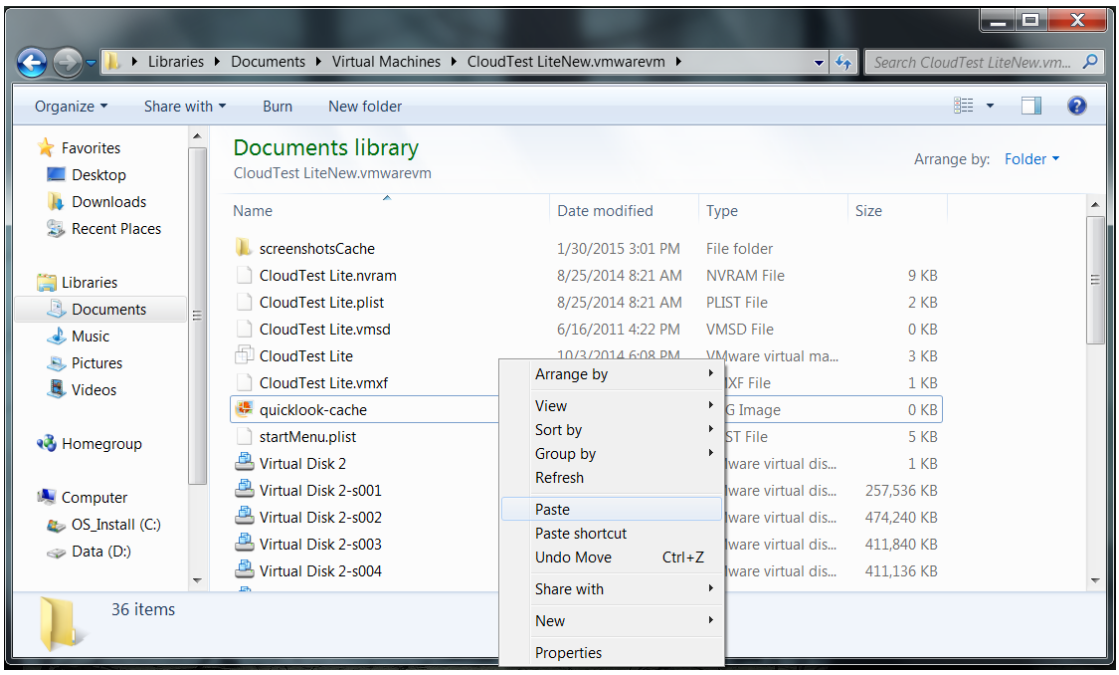
2. Grab and right click on all the files that start Virtual Disk 2 and select "Copy."

TIP: Depending on your Windows setup, the file extension may not be in display.



3. Change to the CloudTest LiteNew.vmware directory.

4. Right-click in the File Manager window and then select “Paste.”



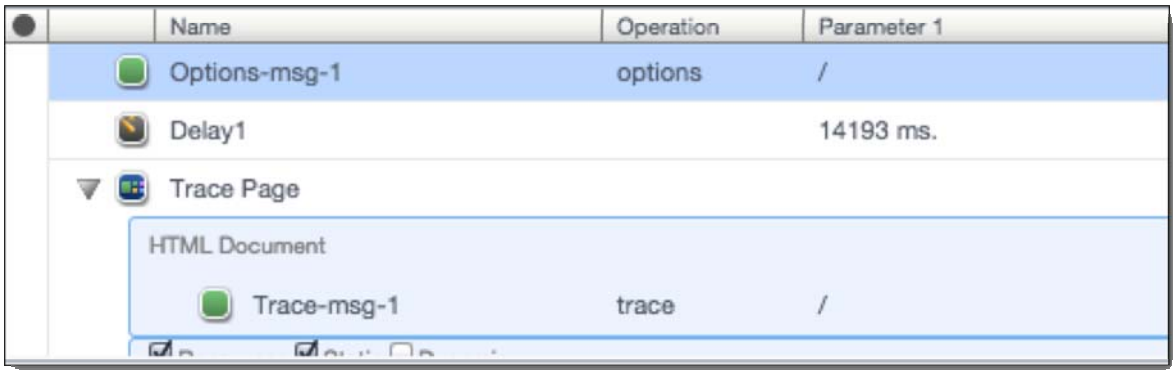
After completing the above steps, restart the CloudTest Lite 54 VM.

Support for Additional HTTP Methods (78361)

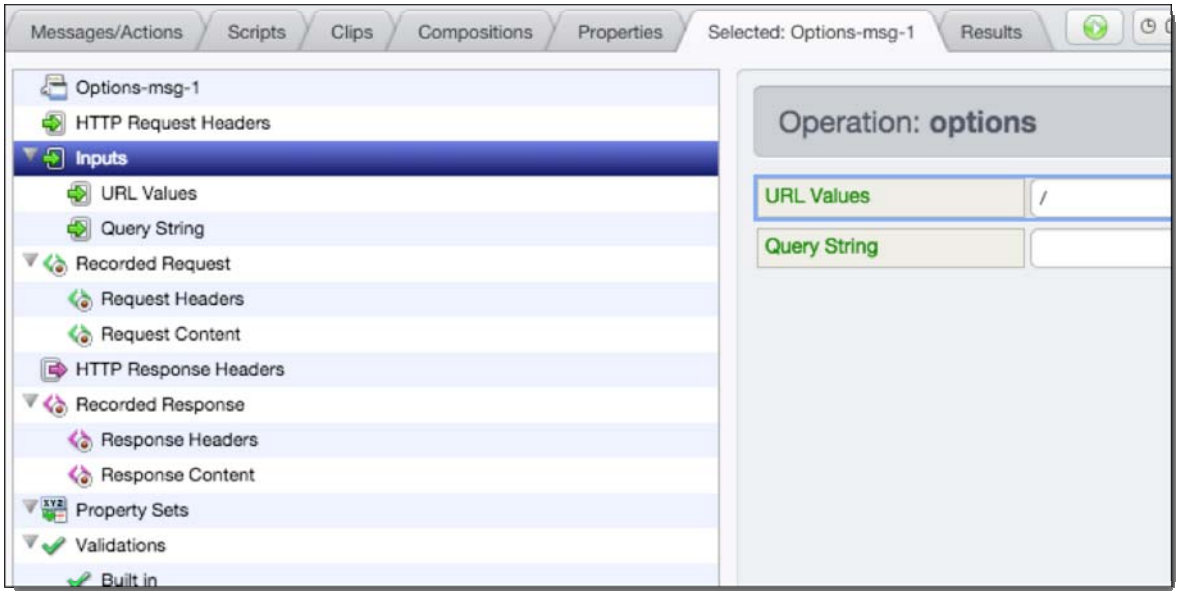
In prior releases, some of the more unusual HTTP methods, including TRACE, OPTIONS, as well as methods related to HTTP Extensions for Distributed Authoring (WebDAV), went unsupported.

Now, all of the above methods are supported in both the underlying layer as well as in the SOASTA 54, CloudTest user interface, including in the Clip Editor, Message Editor, Convert Recording to Clip wizard, the Result Details widget (as well as in the Test Suite Dashboard's in situ Result Details widget).

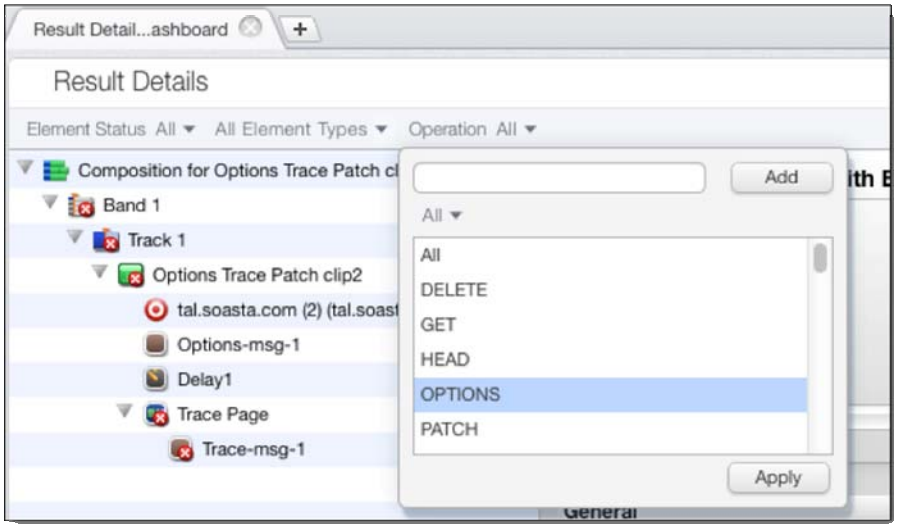
In the Clip Editor screenshot below, an HTTP message based on OPTIONS is shown:



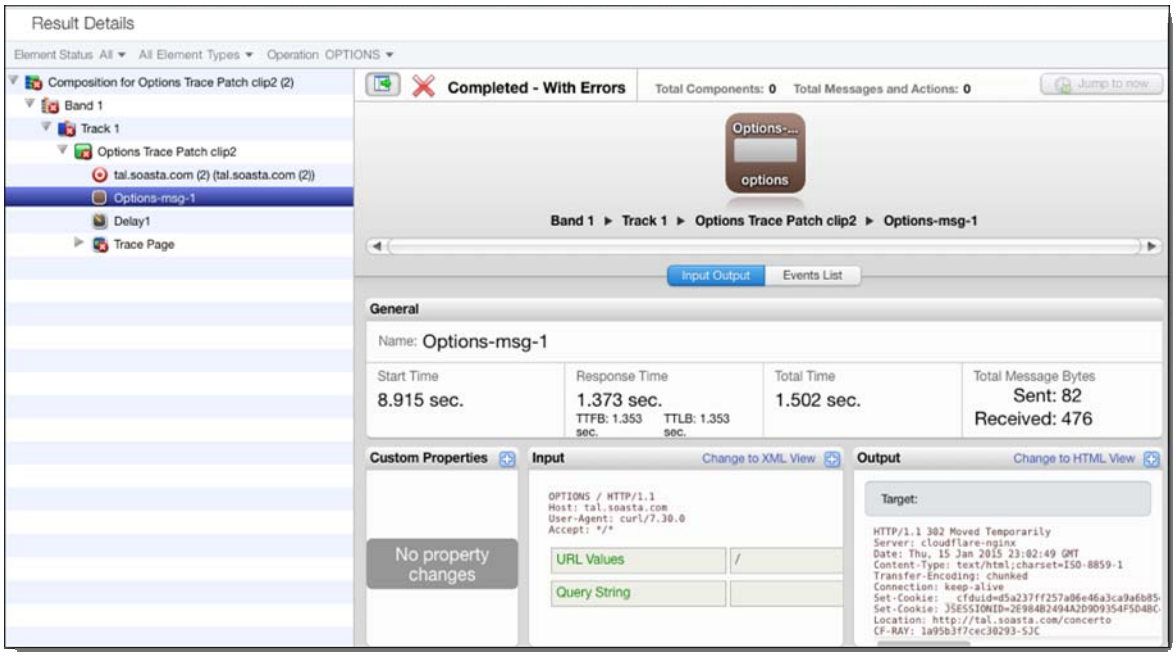
Details about the message are shown in the lower panel as in all prior releases.



Users are now able to filter these additional operations in results in the Result Details Dashboard, Operations drop-down.



As in all prior releases, details about the filtered operations are presented in the panes on the right.

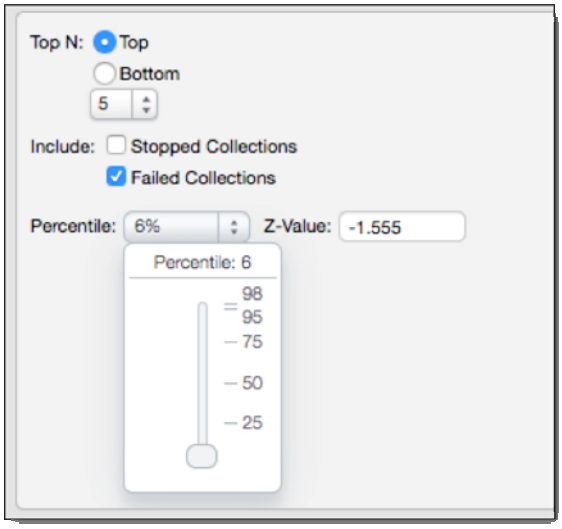


Support for Monitoring JBoss 8 (30032)

Users can now monitor JBoss 8 instances using the Monitor Server Group and Monitor wizard.

Ability to put any percentile into Collection Analysis (Hierarchical) widget (84993)

A Collection Analysis (Hierarchical) widget slider now permits the user to specify a percentile rather than a Z-Value.



TouchTest

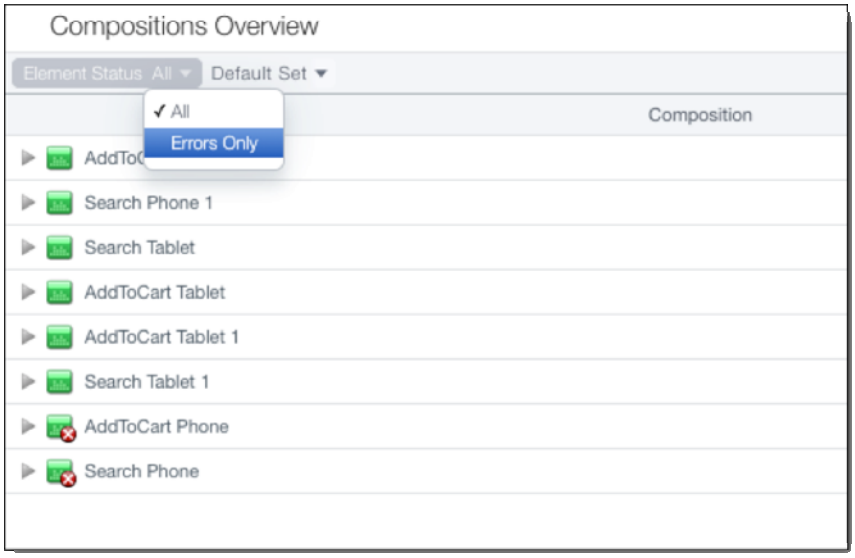
Test Suite Dashboard Improvements

This release introduces many additional improvements to the Test Suite Dashboard feature introduced as part of SOASTA 53.05, including all of the following:

- Errors Only Display in the Compositions Overview widget
- Additional Component Selection Support in Compositions Overview widget
- Import/Export of Master/Child Results in Test Suites

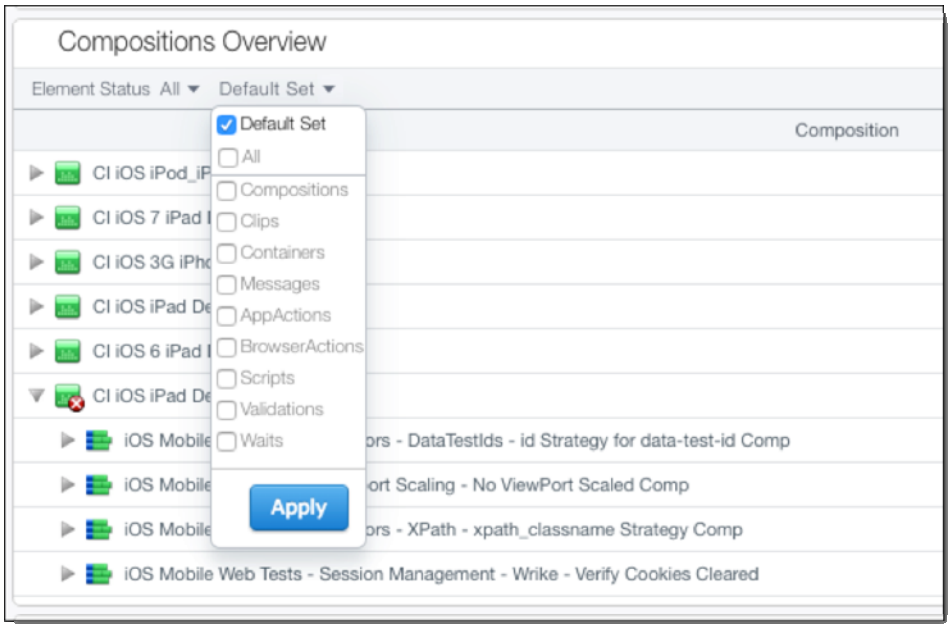
Errors Only Display in Compositions Overview Widget

An errors-only filter has been implemented in the Compositions Overview widget that improves the Test Suite Dashboard's usefulness for viewing test failures.



Additional Component Selection Support in Compositions Overview Widget

As noted in the Support for Additional HTTP Methods section, the Test Suite Dashboard's, Operations drop-down also offers new component selection filters.



Import/Export of Test Suite Results

As part of the Test Suite Dashboard feature, a new master/child relationship was introduced into CloudTest that didn't exist in releases prior to 53.05.

For example, if Composition A contains a clip element that launches Composition B, then when Composition A was run it had a "child" result (from Composition B). There was no facility to export this new Launch Composition (a.k.a Composition B).

Now, users can export the child composition via the Export dialog box as well as via the SOASTA Command Line utility (sCommand).

To do so via the Export box, users will check the new box, Also export any child results. Doing so will include the "child" result when you export the master result.

New `includechildresults` parameter for sCommand

For sCommand users, a new `includechildresults=true` argument can be amended to the Export command whenever used to export a result from a Test Suite composition (e.g. a master composition that includes one or more Launch Compositions) in order to include child results).

This new argument is the command line equivalent of the Export box's "Also export any child results" box (shown above). The default is false in the command-line utility, just as it is in the Export checkbox.

For example, to export result time aggregates from a Test Suite composition and all of its children, use:

```
scommand cmd=export username=bob password=secret type=result
file=myexport.csv name="/Directory/TestSuiteCompositionName/ResultNameDemo"
format=csv resultSource=resultTimeAggregates includechildresults=true
```

Launch Composition Details in sCommand JUnit/XML (88321)

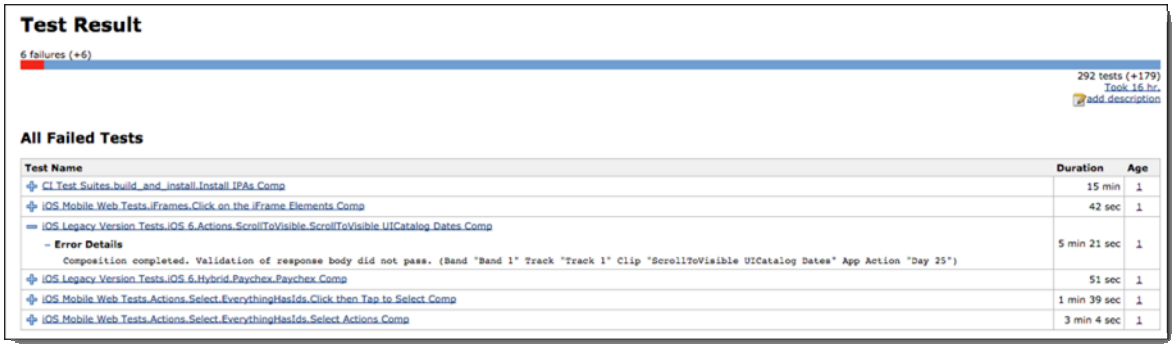
For playing test compositions, Jenkins and other JUnit/XML-friendly CI tools will now include report errors/statistics for Launch Compositions. Support is also provided for text format in addition to JUnit/XML.

On the command line or in the CI tool job:

```
<path to scommand>/scommand cmd=play name="/CI Test Suites/CI iOS Trunk Mobile
Tests Build Comp" file="/Users/fake/fake_directory_path" type=composition
format=junitxml wait=yes failonerror=no
url=http://fake:8080/concertousername=placeholder password=placeholder debug=yes
```

For CI jobs that include JUnit results this will result in enhanced statistics.

In the prior release, limited sCommand results were posted for jobs that included JUnit/XML from Test Suite compositions. In this release, additional detail for each Launch Composition within a given Test Suite composition is posted.



New MakeAppTouchTestable (MATT) Command Line Syntax

As of this release, the MakeAppTouchTestable (MATT) utility requires Java 7. TouchTest users upgrading to SOASTA 54 should update to this Java version. Accordingly, the syntax for running the MakeAppTouchTestable utility has changed in this release. Formerly, MATT syntax was:

```
java -jar MakeAppTouchTestable.jar –help
```

Now, under Java 7, the new syntax is:

```
sh MakeAppTouchTestable/bin/MakeAppTouchTestable -help
```

If Java 7 is unavailable at runtime, the following failure message will display:

```
MakeAppTouchTestable requires Java 7.
```

Bugs Fixed

CloudTest

89461: Invalid "Set-Cookie" header in response

This fix adds a new date format to the list of those parsed for cookie expiration date.

88713: View Analytics dashboard, Performance Counter widget is not showing data

The Performance Counter widget was unexpectedly blank.

88631: Problem with HTTPS recording after auto-upgrade from SOASTA 53 Conductor

Updating the Conductor resulted in this HTTPS recording issue.

88571: Conductor can't be opened on 54.01

An underlying libjpcap resulted in a broken Conductor on update.

87641: Attempting to duplicate a system dashboard and cancelling the operation does not clean up the notification on the spinner

The Spinner progress indicator would hang after an attempt to copy a System Dashboard.

87516: java.lang.NullPointerException

This null pointer error happened in a CloudTest dashboard.

87354: java.lang.UnsupportedOperationException at com.soasta.web.concerto.reporting.hb.b (hb.java:700)

This error occurred in a CloudTest dashboard when a filter passed in an empty string for an element type. Or, it passed in a list and the value field was empty string rather than null.

87232: Collection Analysis (Hierarchical) widget doesn't list the transactions

Transaction containers were not listed in the Collection Analysis (Hierarchical) widget.

86752: java.lang.NullPointer

This null pointer exception could occur while opening a monitor.

86652: First Login User Not Given Monitor Admin Rights

The initial CloudTest/TouchTest account that's created after entering your license key did not have the Monitor Administrator privilege, and therefore could not use monitoring features.

85684: Target Property Sets and Validations - Green plus used to create Property Sets and Validations disappears

The Green plus icon would inadvertently disappear from view while setting Property Sets or Validations in the Target Editor.

85634: Collection Analysis Time Filter does not update last “N Minutes” from toolbar when changed from the toolbar

This fix implements filters text updating, which results in the necessary visible update to toolbar text.

85508: Percentile label is not being updated

On the "Collection Duration Percentile" widget, changing the percentile value updates the title of the widget, but not the Y-axis label.

85247: Google Compute Engine errors are not handled gracefully while listing zones

Errors in Google Compute Engine error handling were responsible for the unexpected failure to list out GCE zones.

84998: Column resize wasn’t working

Column resize didn’t work as expected in the Central, Compositions list. Now, column resizing, as well as sorting, does work as expected.

84802: For input string: "below:0f64ba9a-fe47-4aa3-87dd-b795b20874be"

A non-informative, underlying error message was shown to the user. This is now handled and the exception is now shown.

84776: Uncaught RangeError: Maximum call stack size exceeded; JS line 1752

This range error from an array occurred in CloudTest Lite.

84752: GCE error handling does not catch socket timeouts

Google Compute Engine socket timeouts were not handled as expected.

84587: java.lang.NullPointerException at com.soasta.web.concerto.reporting.db.a (db.java:433)

This null pointer exception happened in a CloudTest dashboard.

84535: Global.oConcertoEditor.onBeforeSize is not a function; JS line 34

This error occurred in a Central editor.

84512: Cannot read property 'Size' of undefined; JS line 702

This JavaScript error occurred in a CloudTest dashboard

84427: java.lang.NullPointer

This null pointer exception occurred in Central.

83957: TypeError: 'undefined' is not an object (evaluating 'ErrorCaptureProxy.isResultsServiceAlive'); JS line 775

This results object error occurred in CloudTest Lite.

83823: This application is not currently available

Firefox extensions cause harmless errors that are caught anyway. Now, these are reported in a user-friendly manner.

82640: Format error converting number (externaldatasource) type: long, property name: parameter3

This DWR error occurred in CloudTest Lite.

82375: java.lang.NullPointerException

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

81946: Cannot read property '3' of null

Additional checks have been added to prevent this error.

81621: Cannot read property '2' of null

This null error occurred in Central.

81544: TypeError: this._base is undefined; JS line 220

Additional checks and a user-friendly error message has been added in the event of similar errors.

80233: <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">String

This document definition error occurred while editing a message clip.

80196: Exporting a user record that had a comma in its name split the export

An attempt to export a user's Accounting Record would result in two exported users if that user name had a comma.

80171: Remove HTML Parser (htmlparser-2.0-20060923.jar) due to CPL license issues

This fix updates the reference results after replacing HTMLParser with JTidy (due to CPL license issues).

79848: Uncaught TypeError: undefined is not a function; JS line 2

This error occurred while loading the Composition Editor, Play tab.

77860: NoClassDefFoundError: com/soasta/common/command/resultsservice/CmdGetResultsServiceStatus

A Results Service error occurred while viewing the Clip Editor.

77837: Failed to execute 'getRangeAt' on 'Selection': 0 is not a valid index

This error occurred in CloudTest Lite, Central.

67245: Attempt to delete volume already deleted should silently fail

An attempt to delete a volume that was already deleted produced this error. Now, when the volume or snapshot has been deleted from EC2 it is handled.

58458: ACL error trying to open an RSDB

An Access Control Error would occur while opening a Result Service Database from the Central list. This fix includes performance better permissions handling.

58279: PersistenceException.OwnerRequired" if a user is deleted while logged in

A fix that logs users off if they are deleted has been checked in. This applies to cases where a single user is deleted. If a user multi-selects users and then deletes them, the old error will be thrown.

49536: Grid UI Shows Server Hours when “Server Hours Tracking” is disabled

Server Hours were still posted after disablement at the license-level.

43026: ScrollToVisible scrolls to the first location correctly but not the second

This longstanding case has now been resolved alongside other scrolling issues in TouchTest.

TouchTest

89560: Recording gets stuck in pendingSelect when moving from picker to picker [requires new TouchTestDriver]

While moving directly from picker to picker, TouchTestDriver gets stuck in a `pendingSelect` in which nothing is recorded.

88662: Offline Licensing Not Working

The Licensing scenario in support of offline instances failed.

88182: Android TTW: Double click, scroll, and pan actions do not execute on Android tablets running OS 4.4.2 [requires new TouchTest Web app]

Double click, scroll, and pan actions do not execute on Android tablets running OS 4.4.2.

88059: TouchTest command descriptions are wrong

Accessor descriptions in the Action Editor (Clip Editor lower panel) were not correct.

87457: Remove the screenshot validation recording capability of Mobile Targets

This functionality has been removed from both iOS and Android versions

85900: undefined is not an object (evaluating 'editTabFrame.Global.oCompositionEditor')

This likely timing error occurred in the Composition Editor, Play tab. Additional checking code has been added for false contexts.

85129: webClick/webType does not playback [requires new TouchTestDriver]

Playback of text entered on a form (e.g., webClick followed by webType) unexpectedly.

81619: Add support for Java 1.7 in MATT [requires new TouchTestDriver]

This fix adds necessary arguments for jarsigner in MakeAppTouchTestable (MATT) in order to provide Java 1.7 support.

66077: Add additional Organization ID field

Partners can now customize the login screen by modifying the CSS classname, .additionalInput.