Apica Loadtest Plugin

Plugin Information
View Apica Loadtest on the plugin site for more information.

The plugin enables Apica Loadtest customers to run automatic load tests as part of a Jenkins build process.

Build runner setup

The plugin is a build runner and can be added to a project on the project's configuration page:

The Apica load test plugin is available in the "Add build step" list:

Source Code Management

- ◉ None
- ○ CVS
- ○ CVS Projectset
- ○ Git
- ○ Subversion

Build Triggers

- ☐ Build after other projects are built
- ☐ Build periodically
- ☐ Poll SCM

Build

Add build step ▼

- Apica Loadtest
- Execute Windows batch command
- Execute shell
- Invoke Ant
- Invoke Rake
- Invoke top-level Maven targets

You'll then see the build runner options:

Build

⠿ **Apica Loadtest**

Environment

Test environment   Enterprise (loadtest.apicasystem.com) ▼

Installation

LTP authentication token: *   [   ]   ⑦
     ⛔ **Please set a valid auth token.**

Preset name: *   [   ]   ⑦
     ⛔ **Please set a preset name.**

Load test scenario: *   [   ]   ⑦
     ⛔ **Please set a loadtest scenario name.**

       Test settings

Thresholds

Thresholds   **Add Threshold**

Delete

Select your environment and set the required entries: the authentication token, the preset name and the load test scenario file name. You can use the Test settings button to test your inputs. If all properties are correct then you'll see a confirmation:

Here are some example error messages in case some property is not correct:

- Exception while checking preset: The authentication ticket is not well formatted.
- No such preset found: short test2
- Load test file name must be either a .class or .zip file.
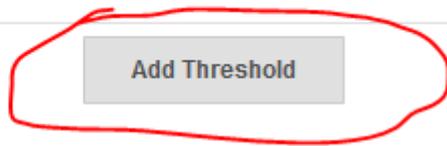- No such load test file found: cldemo_start2.class

Note that Jenkins won't block the user from saving a build runner despite validation errors. The settings are additionally rechecked before a test starts.

Thresholds

It's possible to add thresholds to the test. If the threshold is broken then the test can be marked as "failed":
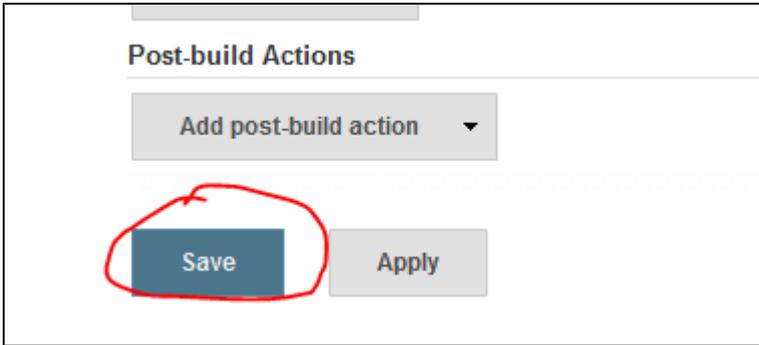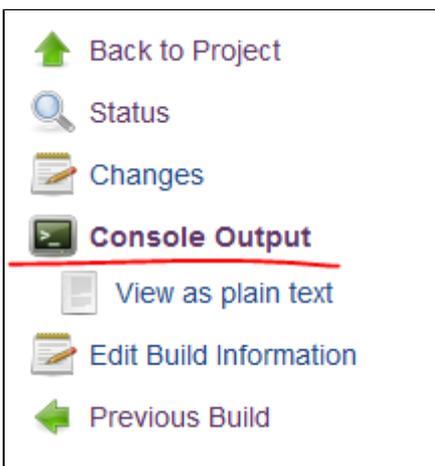

Save your setup:

Running the Apica build runner

You can start the build runner like you would start any other runner in Jenkins. The simplest way is to start a build on the UI:

You can monitor the build progress by clicking on the build number and opening the Console output link:

You can check the detailed build log for messages. They are similar to what people see in the live stats window of LTP:

```
Started by user anonymous
Building in workspace /var/lib/jenkins/jobs/Test/workspace
Apica Loadtest starting...
Load test preset name: short test
Load test file name: cldemo_start.class
Load test environment: Enterprise (loadtest.apicasystem.com)
Threshold values:

If failed loops rate (%) greater than 10.0% then mark test as failed
If average response time per page (sec) greater than 5.0sec then mark test as failed
Attempting to initiate load test...
Successfully inserted job. Job id: 87130
--- Load Test message ---
Job id: 87130
Message date UTC: Wed Mar 18 09:07:11 CET 2015
Job message: Job inserted
--- END ---

--- Load Test message ---
Job id: 87130
Message date UTC: Wed Mar 18 09:07:11 CET 2015
Job message: Job inserted
--- END ---

--- Load Test message ---
Job id: 87130
Message date UTC: Wed Mar 18 09:07:21 CET 2015
Job message: Loadtest job 87130 successfully started.
--- END ---

--- Load Test message ---
Job id: 87130
Message date UTC: Wed Mar 18 09:07:31 CET 2015
Job message: Job ongoing
--- END ---
```

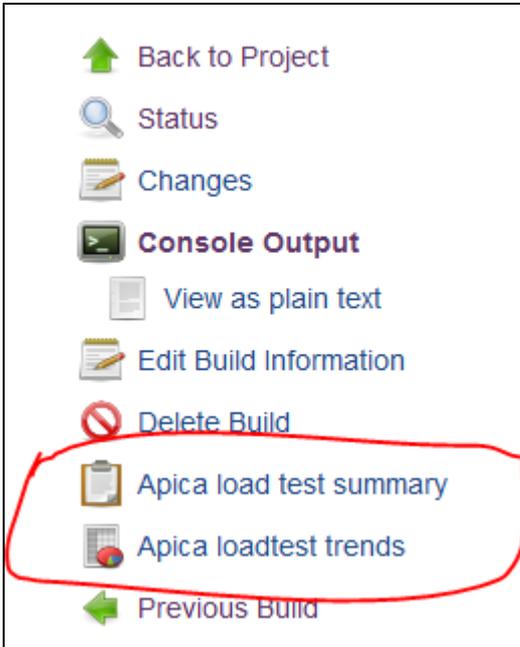The runner checks the job status every 10 seconds at present.

At the end of the job the log shows some basic statistics and the thresholds are evaluated:

```
Job has finished normally. Will now attempt to retrieve some job statistics.
--- Load test job summary message ---
Job id: 87130
Message date UTC: Wed Mar 18 09:10:56 CET 2015
Total passed loops: 1750
Total failed loops: 0
Average network throughput: 49.2 MBit/s
Average session time per loop (s): 1.2
Average response time per loop (s): 1.2
Web transaction rate (Hits/s): 377.0
Average response time per page (s): 1.2
Total http(s) calls: 57849
Avg network connect time (ms): 10
Total transmitted bytes: 744400932
--- END ---

Evaluating threshold values...
If failed loops rate (%) is greater than 10.0% then test fails. Outcome: 0.0% Threshold broken: false
If average response time per page (sec) is greater than 5.0sec then test fails. Outcome: 1.2sec Threshold broken: false
```

Result presentation

Refresh the build page after a successful job. You'll see two links on the left hand panel:

Apica load test summary presents the key statistics in tabular format:

Preset name	Jenkins
Job id	156865
Link to details	Apica LoadTest Results
Date UTC	Mon Feb 15 15:26:46 CET 2016
Total passed loops	39
Total failed loops	0
Average network throughput	231.82 KBit/s
Average session time per loop (s)	12.1
Average response time per loop (s)	0.1
Web transaction rate (Hits/s)	2.0
Average response time per page (s)	0.0
Total http(s) calls	958
Avg network connect time (ms)	3
Total transmitted bytes	14026989

The Apica load test trends tab shows a custom CI page in an iframe: