
marteau Documentation

Release 0.1

Tarek Ziade

April 21, 2013

CONTENTS

1	How to create a Marteau Load Test	3
1.1	Create a Funkload test	3
1.2	Create a Marteau configuration file	3
1.3	Try it locally	4
1.4	Run it on a Marteau server	4

Marteau is based on [Funkload](#), which is a functional and load web tester based on Python.

The main features of Funkload are:

- load tests are plain Python unit tests class
- everything can be run from the command-line
- you can run the load test locally or distributed across many nodes
- nice HTML reports are generated

Marteau is just a Redis-based queue that let you run distributed Funkload load tests through the web.

Marteau features are:

- management of a list of nodes
- management of a list of workers
- enqueues load tests and drives Funkload to run them
- display successes, failures and Funkload reports

HOW TO CREATE A MARTEAU LOAD TEST

Creating a load test for marteau is done in three steps:

- create a Funkload load test - composed of a module and a configuration file
- create a **.marteau.yml** file, that will be used by Marteau as the entry point.
- push everything in a Github repository.

1.1 Create a Funkload test

Just follow Funkload [tutorial](#)

1.2 Create a Marteau configuration file

The Marteau configuration file must be named **.marteau.yml** and must be located in the root of your repository.

.marteau.yml is a YAML file with the following options. Every option is optional except **script**, **test** and **name**.

- **name** – a name describing the load test.
- **script** – the Python module that contains the Funkload test
- **test** – The test to run, which is a class name followed by a method name. e.g. *Class.method*
- **wdir** – the directory relative to the repository root that contains the Funkload test – *defaults to root*
- **nodes** – the number of nodes to use to run the test – *defaults to 1*
- **deps** – a list of PyPI dependencies required by the test. Will be installed on every node prior to starting the load.
- **cycles** – the Funkload cycles. See [definition](#). If not provided, will use the one in the Funkload configuration file.
- **duration** – the duration in seconds of each test. If not provided, will use the one in the Funkload configuration file.
- **email** – if provided, a recipient that will receive an e-mail when a load test run is finished, with a link to the HTML report.

Example of a configuration file

```
name: MarketPlace
test: MarketplaceTest.test_marketplace
script: loadtest.py
nodes: 9
email: tarek@ziade.org
cycles: 10:20:30:100
duration:120
deps:
  - PyBrowserID
```

1.3 Try it locally

Once you have a Funkload test and a Marteau configuration file, you can try to run it locally by using the **marteau** script against the github repo URL or against a directory containing a clone of the repo:

```
$ marteau /Users/tarek/Dev/github.com/tokenserver
2012-08-16 13:27:25 [31624] [INFO] Hammer ready. Where are the nails ?
virtualenv --no-site-packages .
...
2012-08-16 13:46:20 [37308] [INFO] Report generated at '/tmp/report'
2012-08-16 13:46:20 [37308] [INFO] Bye!
```

In this mode, Marteau will ignore the **node** option and just execute the load test locally. Once it's over you get the report generated, and you can view it in your browser.

1.4 Run it on a Marteau server

Once you are happy with your test, you can send it to a Marteau server via the command line, using the **--server** option.

The first thing to do is to get an API key on the target Marteau server.

Let's say Marteau is running on **http://marteau.example.com**.

Visit **http://marteau.example.com/profile** with your Browser-ID login, then hit the *Generate key* button.

You will get a user and secret key - you will need to set in your environment prior to running the script:

```
$ export MACAUTH_USER=tarek@mozilla.com
$ export MACAUTH_SECRET=eab6e5f09faec33...933d0a0e4c082fa74bc1e7a
```

Then you can run the script to add jobs in Marteau:

```
$ bin/marteau https://github.com/mozilla-services/tokenserver --server http://marteau.example.com
2012-08-16 14:21:22 [48118] [INFO] Sending the job to the Marteau server
2012-08-16 14:21:22 [48118] [INFO] Test added at 'http://marteau.example.com/test/a3296777b6eb4d74a8'
2012-08-16 14:21:22 [48118] [INFO] Bye!
```

You can then visit the URL and watch the console live.

Alternatively, you can visit the Marteau server and just fill the form.