

Setting Up PyCharm to Run MozWebQA Tests

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Related Categories: MozWebQA, Python, py.test

PyCharm is a Python IDE, released by **JetBrains**. I quite enjoy using it and, as I've recently started contributing some tests to Mozilla's **Web QA** department (mozwebqa), I wanted to use it to interactively debug some mozwebqa tests. This turned out to be a lot trickier than I had imagined, so I am documenting the steps to do so via this post.

This post assumes you have a project open in PyCharm for one of the mozwebqa projects. I am going to use **marketplace-tests** for this example. As I am on a Mac the instructions and screen shots will be OS X specific, but I imagine they will translate pretty closely to Windows.

Step 1 - Configure py.test as your default test runner

1. Open up the *Preferences...* dialog and choose *Python Integrated Tools* under *Project Settings*.
2. Choose **py.test** as the *Default test runner*.
3. Click *OK*.

Step 2 - Set default run configuration parameters for your project

1. Type **ctrl + alt + R** to open the *Run* configuration selector.
2. Type **0**, or choose the first option (*Edit configurations...*) from the select list.
3. In the *Run* dialog, expand *Defaults > Python's test* and choose **py.test**.
4. Make sure the Python interpreter that you want to use for this project is selected for *Python interpreter*. If you are using virtualenv you may have to configure a new Python interpreter for your virtualenv. More on that in a separate post.
5. Choose the root of your project for *Working directory*.
6. Click *Apply*, then *Close*.

Step 3 - Create a pytest.ini file in the root of your project

This is necessary to pass command line options to py.test. It would be nice if there were a way to do this via the IDE, but I was not able to do it. If anyone knows how, or can figure out how, to do that I'd love to know. *I* was able to pass a single option to the command line from PyCharm, but could not get it to work with multiple options.

1. Create a file called *pytest.ini* in the root of your project.
2. Add the command line options you need into that file under the *[pytest]* section. See below for an example from *marketplace-tests*.
3. Click *OK*.

```
[pytest]
addopts = --driver=firefox --credentials=mine/credentials.yaml --destructive
```

Step 4 - Create a copy of credentials.yaml in a personal folder

You are going to have to edit *credentials.yaml* to place some actual credentials in it, so in order to not have it overwritten each time you do a pull, you should put a copy that you are going to use somewhere else. I tend to create a */mine* folder under the project root and place it there, but you can put it anywhere you like. You will notice that the command line option above uses that */mine* folder to locate the credentials file.

Step 5 - Run your tests

With a file that contains tests open in an editor window, type **ctrl + shift + R** and PyCharm will run all of the tests in the file. If you wish to run just one test, type **ctrl + alt + R**, followed by **0** to open the *Edit configurations...* dialog and then place the name of your test in the *Keywords* input. Click **Run**.