
django-better-test Documentation

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1	Introduction	3
1.1	Compatibility	3
1.2	Installation	3
1.3	Usage	3
2	Differences to Django's built-in test command	5
2.1	Differences	5
2.2	Common Problems	5
3	Changelog	7
3.1	0.10	7
4	Indices and tables	9

better-test is a Django library that provides a more powerful `test` command for your Django project, with a focus on making large test suites run faster.

Introduction

1.1 Compatibility

1.1.1 Python

3.4 and 3.5 are supported. 2.7 and 3.3 should work too but not all features are supported and those versions might not be as stable.

1.1.2 Django

1.7, 1.8, 1.9 and 1.10 are supported.

1.2 Installation

After installing better-test into your virtualenv, add `better_test` to your `INSTALLED_APPS`.

1.3 Usage

You can invoke better-test like you would your standard Django test command using `python manage.py test`. You may pass a list of tests, test modules or test classes to run, just like with your normal Django test command.

1.3.1 `--parallel`

The `--parallel` flag will run your tests distributed across your CPU cores. For large test suites on a computer with several CPU cores, this can significantly speed up your test run.

This flag cannot be used together with `--isolate`.

1.3.2 `--isolate`

This flag will run each test in it's own process (distributed across your CPU cores). This will result in a very long test run, but is useful to find tests that leak state or depend on leaked state. Almost always when tests fail with `--parallel` but pass without it, leaking tests are the reason.

This flag cannot be used together with `--parallel`.

1.3.3 `--failed`

Re-runs all the tests that failed or errored in the last test run.

1.3.4 `--retest`

Re-runs the tests using the same configuration used in the last run.

1.3.5 `--migrate`

Run migrations before your tests.

1.3.6 `--list-slow=<number>`

After the test run, list the `<number>` slowest tests.

1.3.7 `--vanilla`

Bypass better-test and use the standard Django test command. You cannot use any of the arguments mentioned above if you use `--vanilla`.

1.3.8 `--start-method`

New in version 0.10.

Start method to use for multiprocessing. Defaults to `spawn`. Available choices: `spawn`, `fork`, `forkserver`. Refer to the Python documentation for the differences.

Differences to Django's built-in test command

2.1 Differences

- By default, migrations are not run, speeding up the tests. Use *–migrate* to run migrations.
- In *–parallel* or *–isolate* mode, for non-sqlite3 in-memory databases, better-test appends *_<number>* to the database name, where *<number>* is a positive, non-zero integer.
- Tests are always run in a subprocess, which can cause problems with 3rd party tools such as *coverage.py*, see *coverage.py reporting very low coverage*.
- Tests are not run in the same order as the normal test command runs them, especially in *–parallel* mode.

2.2 Common Problems

2.2.1 Tests fail with better-test but pass without it

The number one reason for this is tests that depend on other tests leaking state. While bugs in better-test cannot be ruled out, usually if tests fail under better-test but pass without it, the issue is in the test suite being run. Use *–isolate* mode to find tests that depend on external state.

2.2.2 coverage.py reporting very low coverage

Since tests are run in a subprocess, *coverage.py* will not report the correct coverage by default. To get the correct coverage, run *coverage.py* with the *--parallel-mode* flag and use *coverage combine* after running the tests.

Changelog

3.1 0.10

- Added Changelog
- Added support for Python 3.5
- Added support for Django 1.9
- Added support for Django 1.10
- Added `--start-method` option (Python 3.4, 3.5 only)
- Removed support for Python 2.6
- Removed support for Django 1.6
- Deprecated support for Python 2.7
- Deprecated support for Python 3.3

Note: Python 2.7/3.3 are marked as deprecated. An effort will be made to continue to support them, but not all features will be available on those versions and those versions might be less stable. Please upgrade to a modern Python version as soon as possible.

Indices and tables

- `genindex`
- `modindex`
- `search`