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# **livewatch Documentation**

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**Moccu GmbH & Co. KG**

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livewatch.de integration for Django projects.



## What is django-livewatch?

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*django-livewatch* is a module to integrate your services from [livewatch.de](#). Livewatch has some usefull urls to check if your services are up or down.



## Features

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- cache integration
- `celery` integration
- `django-rq` integration



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## Usage

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### 3.1 Installation

- Install django-livewatch (or download from PyPI):

```
pip install django-livewatch
```

- If you use livewatch with celery add it to INSTALLED\_APPS in settings.py:

```
INSTALLED_APPS = (
    # other apps
    'livewatch',
)
```

- Include livewatch.urls in your urls.py:

```
urlpatterns += patterns('',
    (r'^livewatch/', include('livewatch.urls')),
)
```

### 3.2 Configuration

#### 3.2.1 LIVEWATCH\_EXTENSIONS

If you want to use it with cache or django-celery or django-rq you have to update the LIVEWATCH\_EXTENSIONS setting.

##### cache

Make sure that you have a cache installed and configured.

```
# Example with cache support
LIVEWATCH_EXTENSIONS = (
    'livewatch.extensions.cache:CacheExtension',
)
```

### django-celery

Make sure that you have `celery` installed. You can use the `celery` extra target for that.

```
$ pip install django-livewatch[celery]
```

```
# Example with celery support
LIVEWATCH_EXTENSIONS = (
    'livewatch.extensions.rq:CeleryExtension',
)
```

Celery has to be configured in your `project.celery` module that defines the `celery` app. For more details see the official `celery` documentation.

Please make sure to load tasks from `INSTALLED_APPS`:

```
app.autodiscover_tasks(lambda: settings.INSTALLED_APPS)
```

If you don't load all tasks from the `INSTALLED_APPS` setting, please use `CELERY_IMPORTS` to register the live-watch tasks.

```
# In settings.py
# Activate livewatch.tasks
CELERY_IMPORTS = (
    'livewatch.tasks',
)
```

### django-rq

Make sure that you have `rq` installed. You can use the `rq` extra target for that.

```
$ pip install django-livewatch[rq]
```

```
# Example with rq support
LIVEWATCH_EXTENSIONS = (
    'livewatch.extensions.rq:RqExtension',
)
```

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**Hint:** If you use `celery` or `rq`, you have to ensure that a cache is running!

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For details on writing your own extensions, please see the [Extending Livewatch](#) section.

## 3.3 Usage

Before you can use `django-livewatch`, you have to install and configure it. Please see [Installation](#) for more details.

To integrate `django-livewatch` with [livewatch.de](#) you can use the following URLs:

- `/livewatch/`

... if you're using the cache extension:

- `/livewatch/cache/`

... if you're using the celery extension:

- `/livewatch/celery/`

... if you're using the rq extension:

- /livewatch/rq/

## 3.4 Extending Livewatch

```
from livewatch.extensions.base import BaseExtension

class FooExtension(BaseExtension):
    name = 'foo'

    def check_service(self, request):
        # check that service is running
```

If you use a task queue service like celery or rq you can inherit your custom class from the TaskExtension class

```
from livewatch.extensions.base import TaskExtension

class BarExtension(TaskExtension):
    name = 'bar'

    def run_task(self):
        # check that execution of a task works
```

## 3.5 Contribution

If you like to contribute to this project please read the following guides.

### 3.5.1 Django Code

To install all requirements for development and testing, you can use the provided requirements file.

```
$ make devinstall
```

#### Testing the code

*django-livewatch* uses `py.test` for testing. Please ensure that all tests pass before you submit a pull request. `py.test` also runs PEP8 and PyFlakes checks on every run.

This is how you execute the tests and checks from the repository root directory.

```
$ make tests
```

If you want to generate a coverage report, you can use the following command.

```
$ make coverage
```

Or if you want to generate a HTML version of the coverage report, use the following command.

```
$ make coverage-html
```

The generated HTML files are located in the `htmlcov` folder.

## Documentation

*django-livewatch* uses Sphinx for documentation. You find all the source files in the `docs/source` folder.

To update/generate the HTML output of the documentation, use the following command:

```
$ make docs
```

Please make sure that you don't commit the build files inside `docs/build`.

## 3.6 Changelog

### 3.6.1 0.3.0 2016-01-25

- Added logging if services/checks fail
- Added support for Django 1.8 and 1.9 (actually just enabling tests)

### 3.6.2 0.2.5 2015-04-09

- Another packaging fix for python 2.6

### 3.6.3 0.2.4 2015-04-02

- Main URL now checks for all registered extensions

### 3.6.4 0.2.3 2015-03-31

- Fix packaging for python 2.6

### 3.6.5 0.2.2 2015-03-31

- Restore python 2.6 compatibility

### 3.6.6 0.2.1 2015-03-26

- Add compatibility with Django 1.5

### 3.6.7 0.2.0 2015-03-26

- Lots of improvements to our test-suite
- Documentation updates
- Add new extension for testing `django.core.cache`

### 3.6.8 0.1.1 2015-03-20

- Various documentation updates

### 3.6.9 0.1.0 2015-03-20

- Initial public release



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## Api documentation

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### 4.1 livewatch

#### 4.1.1 livewatch package

##### Subpackages

`livewatch.extensions` package

##### Submodules

###### `livewatch.extensions.base` module

```
class livewatch.extensions.base.BaseExtension
    Bases: object

    check_service (request)
    name = None
class livewatch.extensions.base.TaskExtension
    Bases: livewatch.extensions.base.BaseExtension

    check_service (request)
    name = ‘taskextension’
    run_task ()
```

###### `livewatch.extensions.celery` module

```
class livewatch.extensions.celery.CeleryExtension
    Bases: livewatch.extensions.base.TaskExtension

    name = ‘celery’
    run_task ()
```

###### `livewatch.extensions.rq` module

```
class livewatch.extensions.rq.RqExtension
    Bases: livewatch.extensions.base.TaskExtension

    name = ‘rq’
```

```
run_task()  
livewatch.extensions.rq.livewatch_update_rq_task(key)
```

## Module contents

### Submodules

#### livewatch.tasks module

#### livewatch.urls module

```
urlpatterns = [  
    url(r'^$', LiveWatchView.as_view(), name='livewatch'),  
    url(r'^(?P<service>\w+)/$', LiveWatchView.as_view(), name='livewatch-service'),  
]
```

#### livewatch.utils module

```
livewatch.utils.get_extensions(reload_extensions=False)
```

#### livewatch.views module

```
class livewatch.views.LiveWatchView(**kwargs)  
    Bases: django.views.generic.base.View  
  
    get(request, *args, **kwargs)
```

## Module contents

## **Indices and tables**

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