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# **django uwsgi admin Documentation**

***Release 2.0.1***

**django uwsgi admin maintainers**

**Jan 13, 2023**

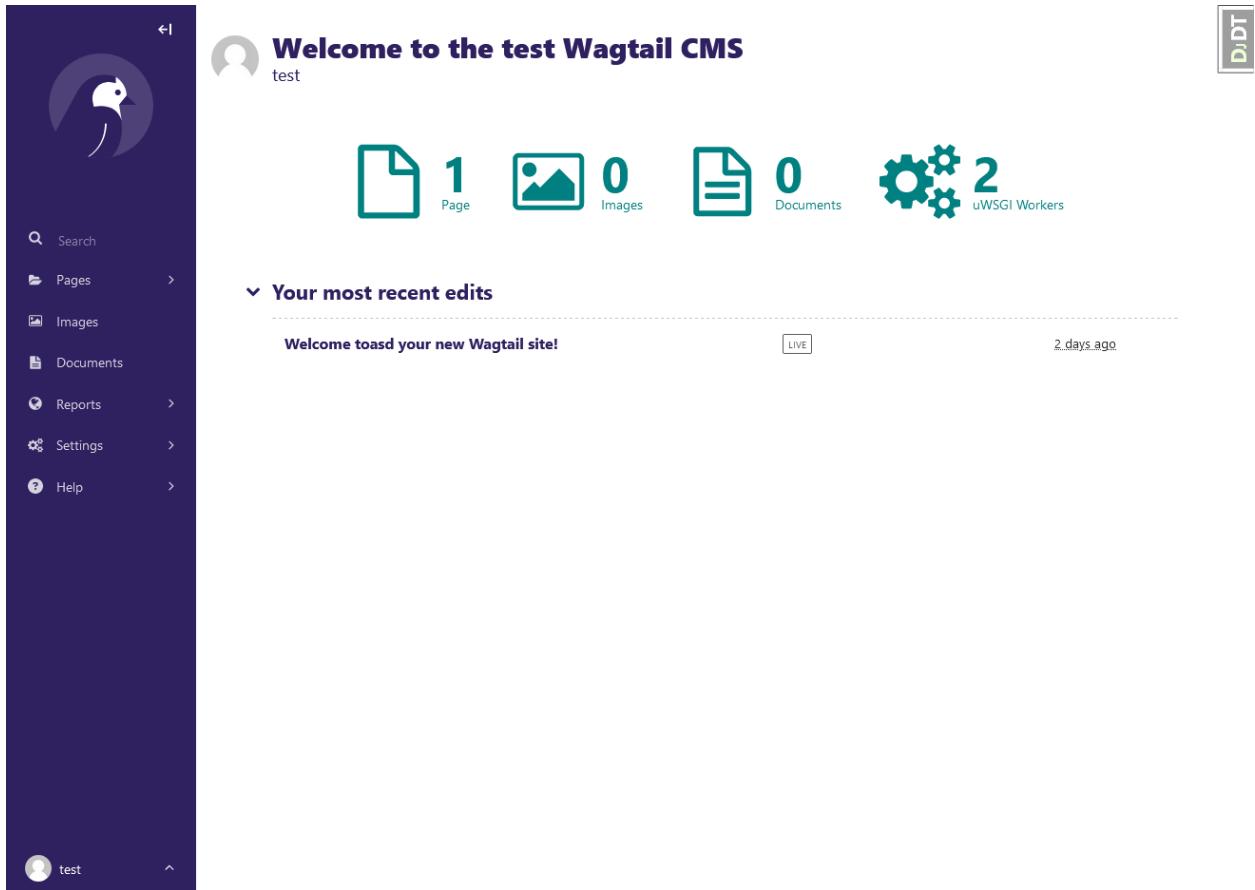




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django.contrib.admin interface

The screenshot shows the Django administration interface for the uWSGI app. The left sidebar contains navigation links for AUTHENTICATION AND AUTHORIZATION (Groups, Users), TAGGIT (Tags), UWWSGI EMPEROR (UWWSGI Emperor Vassals), UWWSGI FOR DJANGO (Actions, Applications, Jobs, Magic Table, Options, Status, Workers), WAGTAIL DOCUMENTS (Documents), and WAGTAIL IMAGES (Images). The main content area is titled "Actions" and includes four buttons: "Send uWSGI Signal" (with a "Signal number" input field and a "SEND" button), "Send uWSGI Log message" (with a "Log message" input field and a "SEND" button), "Gracefully reload uWSGI" (with a "RELOAD" button), and "Clear uWSGI cache" (with a "CLEAR CACHE" button).













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CHAPTER  
**TWO**

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**FEATURES**

- Admin page with `uWSGI` stats (options to reload/stop `uWSGI`, clear `uWSGI` cache)
- `uWSGI Cache Backend` for Django
- `uWSGI Email Backend` for Django (send emails via `uWSGI`'s spooler)
- Debug Panel for `django-debug-toolbar` (offers same functions as admin page)
- Django template loader for `embedded` into `uWSGI` files
- Django `Management Command` `runuwsgi` (with live autoreload when DEBUG is True)
- `uWSGI` config generator
- Django CBV Mixins based on `uWSGI` decorators
- Forms to send log messages and signals to `uWSGI` via admin interface

Some features are not added into repo or not yet implemented (See *Todo*)



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**CHAPTER  
THREE**

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## **INSTALLATION**

At the command line:

```
pip install django uwsgi-admin
```

By default django uwsgi doesn't require uWSGI as requirement. And here are a few known reasons why:

- Django project is installed into virtualenv and ran in [Emperor](#) mode. In this case uWSGI is installed system-wide or into some other virtualenv.
- Some devs love to use system package managers like apt and prefer to install uwsgi other way.
- You need to build uWSGI with custom profile ex: `UWSGI_PROFILE=gevent pip install uwsgi`

You can install django uwsgi with uWSGI by appending `[uwsgi]` to the install command:

```
pip install 'django uwsgi-admin[uwsgi]'
```



## CONFIGURATION

### 4.1 Adding django uwsgi to your project

Add 'django\_uwsgi', to your INSTALLED\_APPS in settings.py:

```
INSTALLED_APPS += ['django_uwsgi',]
```













```
@harakiri(10)
def slow_function(foo, bar):
    for i in range(0, 10000):
        for y in range(0, 10000):
            pass

# or the alternative lower level api

uwsgi.set_user_harakiri(30) # you have 30 seconds. fight!
slow_func()
uwsgi.set_user_harakiri(0) # clear the timer, all is well
```

## EMAIL BACKEND

A Django backend for e-mail delivery using uWSGI Spool to queue deliveries.

### 6.1 Usage

First, add uWSGI backend in your settings file.

```
EMAIL_BACKEND = 'django_uwsgi.mail.EmailBackend'
```

And send your e-mails normally.

```
from django.core.mail import send_mail

send_mail('Subject here', 'Here is the message.', 'from@example.com',
          ['to@example.com'], fail_silently=False)
```

### 6.2 Note

You must setup uwsgi spooler. Example ini:

```
plugin = spooler
spooler = /tmp
spooler-import = django_uwsgi.tasks
```

or use built in management command *runuwsgi*

### 6.3 Changing the backend

By default the ‘django.core.mail.backends.smtp.EmailBackend’ is used for the real e-mail delivery. You can change that using:

```
UWSGI_EMAIL_BACKEND = 'your.backend.EmailBackend'
```

## 6.4 django-configurations

If you're using django-configurations in your project, you must setup importer as mentioned in django-configurations docs for celery

## CACHE BACKEND

### 7.1 Installation

change settings to:

```
CACHES = {  
    'default': {  
        'BACKEND': 'django_uwsgi.cache.UwsgiCache',  
  
        # and optionally, if you used a different cache name  
        'LOCATION': 'foobar'  
    }  
}
```

### 7.2 django-confy

if you're using `django-confy`, you can use url like:

```
CACHE_URL=uwsgi://foobar
```

### 7.3 Settings

`UWSGI_CACHE_FALLBACK`

- `False` - raises Exception if `uwsgi` cannot be imported.
- `True` (default) - if `uwsgi` is not importable this cache backend will alias to `LocMemCache`. Note that south or other management commands might try to load the cache backend so this is why it's the default.



## **MANAGEMENT COMMAND**

### **8.1 runuwsgi**

```
python manage.py runuwsgi
```

### **8.2 runuwsgi options:**

### **8.3 http**

```
python manage.py runuwsgi http=8000
```

### **8.4 socket**

```
python manage.py runuwsgi socket=/tmp/projectname-uwsgi.sock
```

### **8.5 Other options**

Any other options can be passed via environment variables, prefixed with *UWSGI\_* and converted to upper-case, or as key-value pairs in a dictionary named *UWSGI* in settings.

Options from *UWSGI* in settings are passed to uwsgi as INI, which allows passing multi-value options. Example:

```
UWSGI = {
    "module": "my.project.wsgi",
    "attach-daemon": ["memcached -p 11311", "celery -A my.project.tasks worker"]
}
```





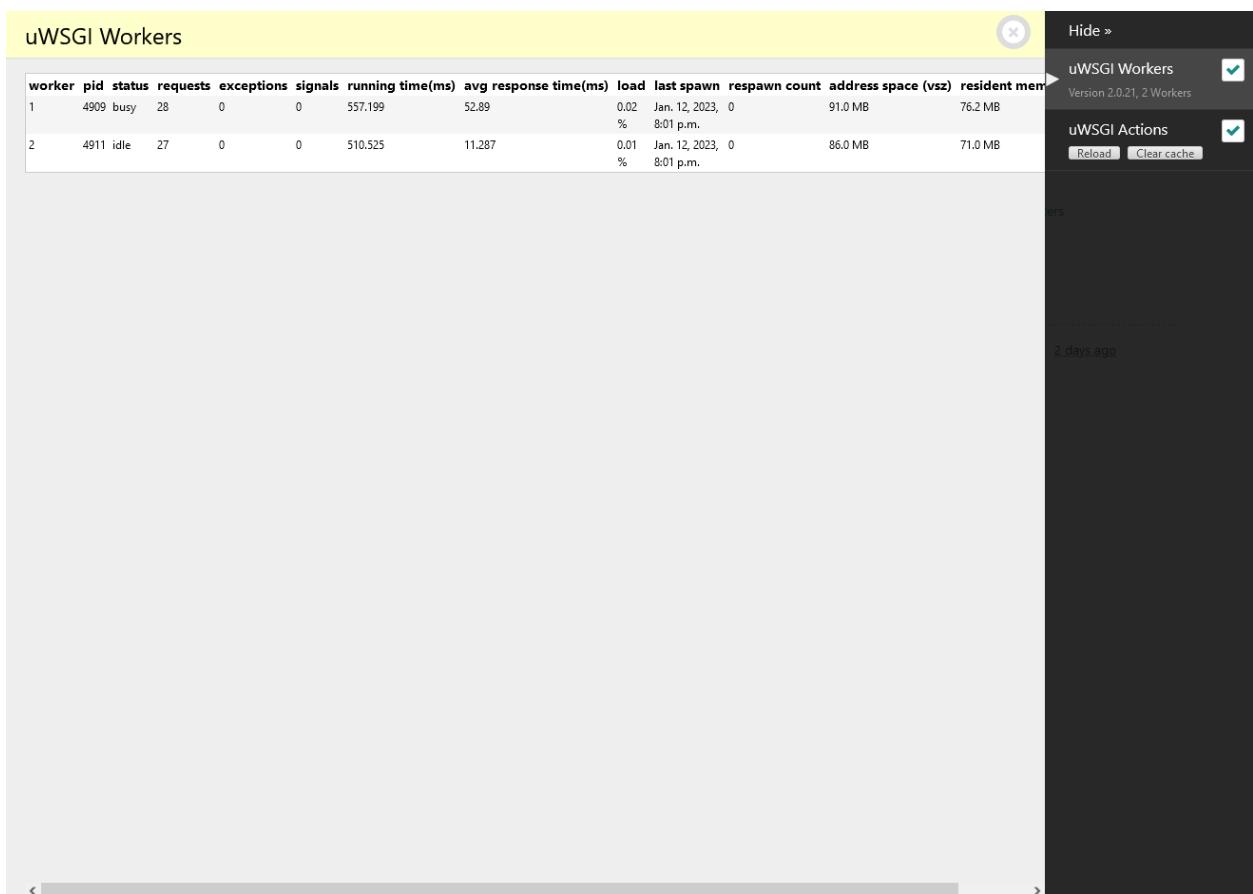


**INTEGRATIONS**

## 10.1 Django-Debug-Toolbar

If you're using `django-debug-toolbar`, you can add:

```
DEBUG_TOOLBAR_PANELS += ['django_uwsgi.panels.UwsgiPanel',]
```



The screenshot shows the Django Debug Toolbar interface with the "uWSGI Workers" panel open. The panel displays a table of worker statistics:

worker	pid	status	requests	exceptions	signals	running time(ms)	avg response time(ms)	load	last spawn	respawn count	address	space (vsz)	resident mem
1	4909	busy	28	0	0	557.199	52.89	0.02 %	Jan. 12, 2023, 8:01 p.m.	0	91.0 MB	76.2 MB	
2	4911	idle	27	0	0	510.525	11.287	0.01 %	Jan. 12, 2023, 8:01 p.m.	0	86.0 MB	71.0 MB	

On the right side of the panel, there is a sidebar with checkboxes for "uWSGI Workers" (checked) and "uWSGI Actions" (checked), along with "Reload" and "Clear cache" buttons. The sidebar also shows the version information: "Version 2.0.21, 2 Workers".

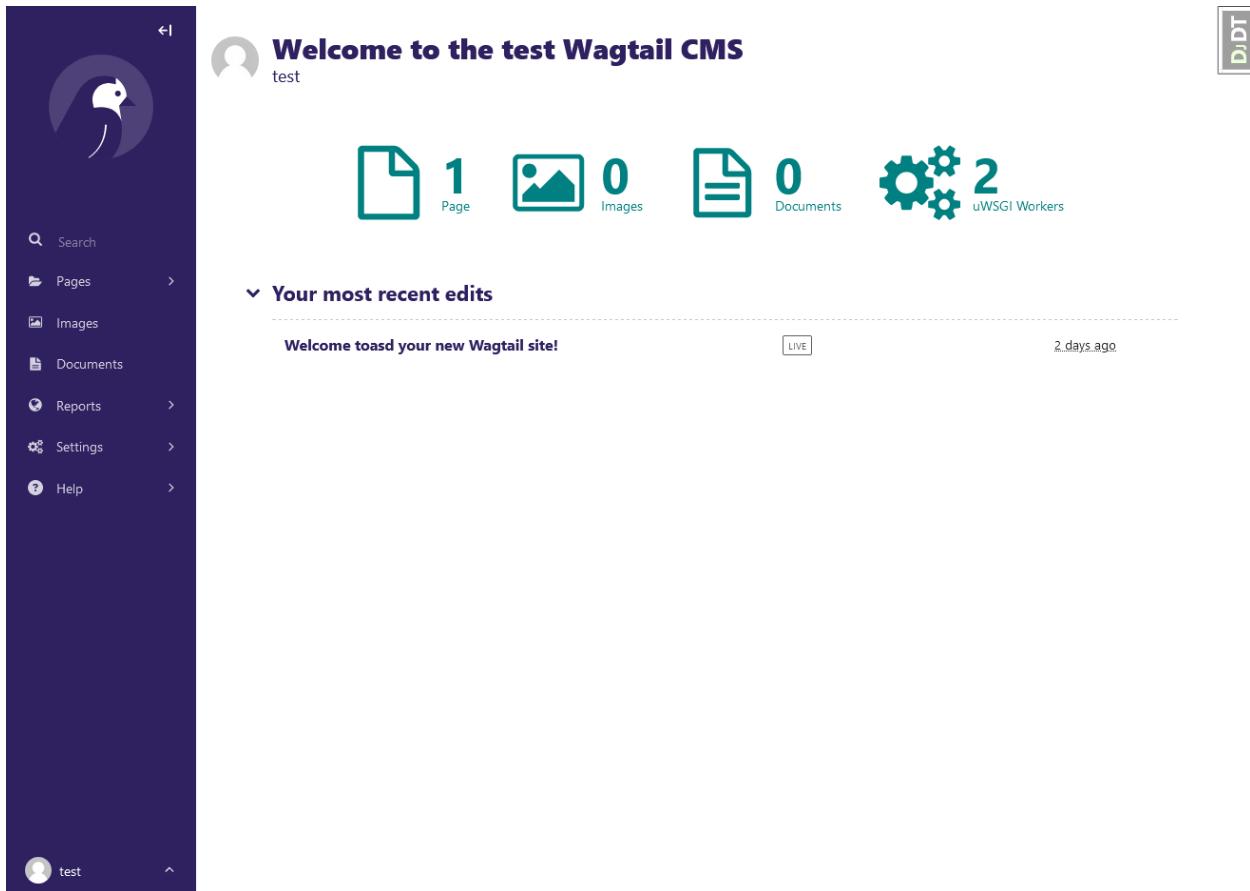
## 10.2 Wagtail

If you're using Wagtail:

There is `wagtail_hooks.py` file available and Wagtail will read it automatically

And you don't have to add `django_uwsgi` into urls.py

Wagtail admin interface:



Django administration

WELCOME, TEST, VIEW SITE / CHANGE PASSWORD / LOG OUT

Home › uWSGI › Actions ›

**AUTHENTICATION AND AUTHORIZATION**

- Groups [+ Add](#)
- Users [+ Add](#)

**TAGGIT**

- Tags [+ Add](#)

**UWSGI EMPEROR**

- UWSGI Emperor Vassals [+ Add](#)

**UWSGI FOR DJANGO**

- Actions
- Applications
- Jobs
- Magic Table
- Options
- Status
- Workers

**WAGTAIL DOCUMENTS**

- Documents [+ Add](#)

**WAGTAIL IMAGES**

- Images [+ Add](#)

**Actions**

Send uWSGI Signal

Signal number

SEND

Send uWSGI Log message

Log message

SEND

Gracefully reload uWSGI

RELOAD

Clear uWSGI cache

CLEAR CACHE

WORKER	PID	APP	MODIFIER1	MOUNTPOINT	INTERPRETER	CALLABLE	CHDIR	REQUESTS	EXCEPTIONS
1	4909	0	0	"	29760448	140448289671872	"	16	0
2	4911	0	0	"	29760448	140448289671872	"	16	0

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CHAPTER  
**ELEVEN**

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**TODO**

- Tests
- uWSGI config generator
- Improve [Docs](#)
- Translations?
- Good cache panel
- Ability to add cronjobs/filemonitors via admin interface
- Options for sendfile if uwsgi serving files

Some code is borrowed from projects I did earlier and some code is still not added yet, but does exists in my projects.



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CHAPTER  
**TWELVE**

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**REFERENCE**

## **12.1 django\_uwsgi**



## CONTRIBUTING

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given.

### 13.1 Bug reports

When [reporting a bug](#) please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

### 13.2 Documentation improvements

django uwsgi admin could always use more documentation, whether as part of the official django uwsgi admin docs, in docstrings, or even on the web in blog posts, articles, and such.

### 13.3 Feature requests and feedback

The best way to send feedback is to file an issue at <https://github.com/ionelmc/django-uwsgi-admin/issues>.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that code contributions are welcome :)

## 13.4 Development

To set up `django-uwsgi-admin` for local development:

1. Fork `django-uwsgi-admin` (look for the “Fork” button).
2. Clone your fork locally:

```
git clone git@github.com:YOURGITHUBNAME/django-uwsgi-admin.git
```

3. Create a branch for local development:

```
git checkout -b name-of-your-bugfix-or-feature
```

Now you can make your changes locally.

4. When you’re done making changes run all the checks and docs builder with `tox` one command:

```
tox
```

5. Commit your changes and push your branch to GitHub:

```
git add .  
git commit -m "Your detailed description of your changes."  
git push origin name-of-your-bugfix-or-feature
```

6. Submit a pull request through the GitHub website.

### 13.4.1 Pull Request Guidelines

If you need some code review or feedback while you’re developing the code just make the pull request.

For merging, you should:

1. Include passing tests (run `tox`).
2. Update documentation when there’s new API, functionality etc.
3. Add a note to `CHANGELOG.rst` about the changes.
4. Add yourself to `AUTHORS.rst`.

### 13.4.2 Tips

To run a subset of tests:

```
tox -e envname -- pytest -k test_myfeature
```

To run all the test environments in *parallel*:

```
tox -p auto
```

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**CHAPTER  
FOURTEEN**

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**AUTHORS**

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## CHANGELOG

### 15.1 2.0.1 (2023-01-13)

- UwsgiWorkersPanel no longer tries to generate stats if there's no uwsgi.

### 15.2 2.0.0 (2023-01-12)

- Removed the decorators module, something that only existed to avoid installing a separate package. Instead you should install the updated `uwsgidecorators` package.
- Removed `django_uwsgi.template.Loader` (and the whole module) as it was broken and pretty hard to test without a custom build of uWSGI.
- Split all sections in the Status page into separate admin pages: Actions, Applications, Jobs, Magic Table, Options, Status and Workers.
- Removed the old django debug toolbar and replaced with 2 new panes:
  - `django_uwsgi.panels.UwsgiWorkersPanel`
  - `django_uwsgi.panels.UwsgiActionsPanel`

### 15.3 1.0.0 (2023-01-10)

- Removed the `runuwsgi` management command as it was very broken. Yes, I've looked at `django-uwsgi-ng` (another fork, which has lots of changes for that command) and it's still pretty unusable in general (expects a certain project layout, and still generates weird if not broken configuration).

Instead you should own your uWSGI configuration and not let some tool generate it for you as some of the options have high impact on the behavior and performance of uWSGI.

- Fixed stats page title.
- Made clear cache and reload actions be performed safely over POST requests (previously they were GET requests).

## **15.4 0.3.0 (2023-01-09)**

Forked from <https://github.com/unbit/django-uwsgi> this adds:

- Support for latest Django releases (3.2+).
- A basic integration test suite.
- Removed lots of old compat cruft.
- Integrated the uWSGI stats pane directly in the Django admin. Adding urls manually is no longer necessary.
- Removed the old wagtail-styled admin page (it was broken anyway).

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**SIXTEEN**

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