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# Flask-Sitemap Documentation

*Release 0.3.0*

CERN

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Flask-Sitemap is a Flask extension helping with sitemap generation.



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# CHAPTER 2

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## Installation

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Flask-Sitemap is on PyPI so all you need is :

```
$ pip install flask-sitemap
```

The development version can be downloaded from [its page at GitHub](#).

```
$ git clone https://github.com/inveniosoftware/flask-sitemap.git
$ cd flask-sitemap
$ python setup.py develop
$ ./run-tests.sh
```

## 2.1 Requirements

Flask-Sitemap has the following dependencies:

- [Flask](#)
- [blinker](#)
- [six](#)

Flask-Sitemap requires Python version 2.6, 2.7 or 3.3+



# CHAPTER 3

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## Usage

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This part of the documentation will show you how to get started in using Flask-Sitemap with Flask.

This guide assumes you have successfully installed Flask-Sitemap and a working understanding of Flask. If not, follow the installation steps and read about Flask at <http://flask.pocoo.org/docs/>.

### 3.1 Simple Example

First, let's create the application and initialise the extension:

```
from flask import Flask, session, redirect
from flask_sitemap import Sitemap
app = Flask("myapp")
ext = Sitemap(app=app)

@app.route('/')
def index():
    pass

@ext.register_generator
def index():
    # Not needed if you set SITEMAP_INCLUDE_RULES_WITHOUT_PARAMS=True
    yield 'index', {}

if __name__ == '__main__':
    app.run(debug=True)
```

If you save the above as `app.py`, you can run the example application using your Python interpreter:

```
$ python app.py
* Running on http://127.0.0.1:5000/
```

and you can observe generated sitemap on the example pages:

```
$ firefox http://127.0.0.1:5000/
$ firefox http://127.0.0.1:5000/sitemap.xml
```

You should now be able to emulate this example in your own Flask applications. For more information, please read the [Index Page](#) guide, the [Caching](#) guide, and peruse the [API](#).

## 3.2 Index Page

By default, a sitemap contains set of urls up to `SITEMAP_MAX_URL_COUNT`. When the limit is reached a sitemap index file with list of sitemaps is served instead. In order to ease [Caching](#) of sitemaps a signal `sitemap_page_needed` is fired with current application object, page number and url generator.

## 3.3 Caching

Large sites should implement caching of their sitemaps. The following example shows an basic in-memory cache that can be replaced by [Flask-Cache](#).

```
from functools import wraps
from flask_sitemap import Sitemap, sitemap_page_needed

cache = {} # replace by *Flask-Cache* instance or similar

@sitemap_page_needed.connect
def create_page(app, page, urlset):
    cache[page] = sitemap.render_page(urlset=urlset)

def load_page(fn):
    @wraps(fn)
    def loader(*args, **kwargs):
        page = kwargs.get('page')
        data = cache.get(page)
        return data if data else fn(*args, **kwargs)
    return loader

self.app.config['SITEMAP_MAX_URL_COUNT'] = 10
self.app.config['SITEMAP_VIEW_DECORATORS'] = [load_page]

sitemap = Sitemap(app=self.app)
```

# CHAPTER 4

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## Configuration

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The details of the application settings that can be customized.

### 4.1 SITEMAP\_URL\_SCHEME

Default: `http`.

### 4.2 SITEMAP\_BLUEPRINT

If `None` or `False` then the Blueprint is not registered.

Default: `flask_sitemap`.

### 4.3 SITEMAP\_GZIP

Default: `False`.

### 4.4 SITEMAP\_BLUEPRINT\_URL\_PREFIX

Default: `/`.

### 4.5 SITEMAP\_ENDPOINT\_URL

Return sitemap index or sitemap for pages with less than `SITEMAP_MAX_URL_COUNT` urls.

Default: `/sitemap.xml`.

## 4.6 SITEMAP\_ENDPOINT\_PAGE\_URL

Return GZipped sitemap for given page range of urls.

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**Note:** It is strongly recommended to provide caching decorator.

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Default: /sitemap<int:page>.xml

## 4.7 SITEMAP\_INCLUDE\_RULES\_WITHOUT\_PARAMS

Default: False.

## 4.8 SITEMAP\_IGNORE\_ENDPOINTS

Default: None.

## 4.9 SITEMAP\_VIEW\_DECORATORS

Default: [ ].

## 4.10 SITEMAP\_MAX\_URL\_COUNT

The maximum number of urls per one sitemap file can be up to 50000, however there is 10MB limitation for the file.

Default: 10000.

# CHAPTER 5

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## API

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This documentation section is automatically generated from Flask-Sitemap's source code.

### 5.1 Flask-Sitemap

Flask extension for generating page /sitemap.xml.

Initialization of the extension:

```
>>> from flask import Flask
>>> from flask_sitemap import Sitemap
>>> app = Flask('myapp')
>>> ext = Sitemap(app=app)
```

or alternatively using the factory pattern:

```
>>> app = Flask('myapp')
>>> ext = Sitemap()
>>> ext.init_app(app)
```

**class flask\_sitemap.Sitemap(app=None, command\_name='sitemap')**

Flask extension implementation.

**gzip\_response(data)**

Gzip response data and create new Response instance.

**init\_app(app, command\_name=None)**

Initialize a Flask application.

#### Parameters

- **app** – Application to register.
- **command\_name** – Register a Click command with this name, or skip if False.

New in version 0.3.0: The *command\_name* parameter.

**page** (*page*)

Generate sitemap for given range of urls.

**register\_generator** (*generator*)

Register an URL generator.

The function should return an iterable of URL paths or (*endpoint*, *values*) tuples to be used as `url_for(endpoint, **values)`.

**Returns** the original generator function

**render\_page** (*urlset=None*)

Render GZipped sitemap template with given url set.

**sitemap** ()

Generate sitemap.xml.

**xml\_response** (*data*)

Return a standard XML response.

# CHAPTER 6

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## Changelog

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Here you can see the full list of changes between each Flask-Sitemap release.

### 6.1 Version 0.3.0 (released 2017-05-02)

#### 6.1.1 New features

- Adds integration with Click library for Flask 0.11+.

#### 6.1.2 Improved features

- Improves exclusion of specific URLs without parameters from to the sitemap. (closes #24) (closes #25) (closes #26)

#### 6.1.3 Bug fixes

- Reuses exiting request context if it exists. (closes #35)
- Prepends ‘/’ to endpoint urls for compatibility with Flask 1.0.
- Improves documentation about SITEMAP\_URL\_SCHEME.
- Fixes typo in SITEMAP\_VIEW\_DECORATORS.

#### 6.1.4 Notes

- Removes support for Python 2.6 and 3.3.

## 6.2 Version 0.2.0 (released 2016-01-05)

### 6.2.1 New features

- Adds new command line interface to generate sitemap. (#13)

### 6.2.2 Improved features

- Adds ‘application/octet-stream’ content type to GZipped response. (#20)

### 6.2.3 Bug fixes

- Uses pytest-runner as distutils command with dependency resolution.

### 6.2.4 Notes

- Improves integration of PyTest and addresses problem with missing test requirements. (#15)
- If you want to use command line interface install dependencies using `pip install flask-sitemap[cli]`.

## 6.3 Version 0.1.0 (released 2015-02-03)

- Initial public release. (#12)
- Support for configurable gzip response.
- Quickstart example for signals and caching. (#8)
- Support for sitemap pages. (#3)
- Adds an option `SITEMAP_VIEW_DECORATORS` for specifying list of view decorators. (#4)
- Adds support for ignoring certain endpoints through `SITEMAP_IGNORE_ENDPOINTS` configuration option. (#2)
- Adds new option to automatically include all endpoints without parameters. In order to enable this feature set `SITEMAP_INCLUDE_RULES_WITHOUT_PARAMS` to True. (#2)

# CHAPTER 7

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## Contributing

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Bug reports, feature requests, and other contributions are welcome. If you find a demonstrable problem that is caused by the code of this library, please:

1. Search for [already reported problems](#).
2. Check if the issue has been fixed or is still reproducible on the latest *master* branch.
3. Create an issue with [a test case](#).

If you create a feature branch, you can run the tests to ensure everything is operating correctly:

```
$ ./run-tests.sh
...
Ran 8 tests in 0.246s

OK
Name          Stmts  Miss  Cover  Missing
-----
flask_sitemap/__init__    47      0   100%
flask_sitemap/config       4      0   100%
flask_sitemap/version      2      0   100%
-----
TOTAL                53      0   100%
```



# CHAPTER 8

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## License

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# CHAPTER 9

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## Authors

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Flask-Sitemap is developed for use in Invenio digital library software.

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