
Flask-Sitemap Documentation

Release 0.3.0

CERN

May 02, 2018

Contents

1	Contents	3
2	Installation	5
2.1	Requirements	5
3	Usage	7
3.1	Simple Example	7
3.2	Index Page	8
3.3	Caching	8
4	Configuration	9
4.1	SITEMAP_URL_SCHEME	9
4.2	SITEMAP_BLUEPRINT	9
4.3	SITEMAP_GZIP	9
4.4	SITEMAP_BLUEPRINT_URL_PREFIX	9
4.5	SITEMAP_ENDPOINT_URL	9
4.6	SITEMAP_ENDPOINT_PAGE_URL	10
4.7	SITEMAP_INCLUDE_RULES_WITHOUT_PARAMS	10
4.8	SITEMAP_IGNORE_ENDPOINTS	10
4.9	SITEMAP_VIEW_DECORATORS	10
4.10	SITEMAP_MAX_URL_COUNT	10
5	API	11
5.1	Flask-Sitemap	11
6	Changelog	13
6.1	Version 0.3.0 (released 2017-05-02)	13
6.2	Version 0.2.0 (released 2016-01-05)	14
6.3	Version 0.1.0 (released 2015-02-03)	14
7	Contributing	15
8	License	17
9	Authors	19
9.1	Contributors	19
	Python Module Index	21

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

CHAPTER 1

Contents

CHAPTER 2

Installation

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+

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 or 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)
```

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.

Note: It is strongly recommended to provide caching decorator.

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`.

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.

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

Contributing

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

License

Flask-Sitemap is free software; you can redistribute it and/or modify it under the terms of the Revised BSD License quoted below.

Copyright (C) 2013, 2014 CERN.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

In applying this license, CERN does not waive the privileges and immunities granted to it by virtue of its status as an Intergovernmental Organization or submit itself to any jurisdiction.

Flask-Sitemap is developed for use in [Invenio](#) digital library software.

Contact us at info@inveniosoftware.org

9.1 Contributors

- Jiri Kuncar <jiri.kuncar@cern.ch>
- Chris Hawkes <noobniche@gmail.com>
- Albert Wang <aywang31@gmail.com>

f

`flask_sitemap`, [11](#)

`flask_sitemap.config`, [9](#)

F

`flask_sitemap` (module), [11](#)
`flask_sitemap.config` (module), [9](#)

G

`gzip_response()` (`flask_sitemap.Sitemap` method), [11](#)

I

`init_app()` (`flask_sitemap.Sitemap` method), [11](#)

P

`page()` (`flask_sitemap.Sitemap` method), [11](#)

R

`register_generator()` (`flask_sitemap.Sitemap` method), [12](#)
`render_page()` (`flask_sitemap.Sitemap` method), [12](#)

S

`Sitemap` (class in `flask_sitemap`), [11](#)
`sitemap()` (`flask_sitemap.Sitemap` method), [12](#)

X

`xml_response()` (`flask_sitemap.Sitemap` method), [12](#)