Flask-Sitemap is a Flask extension helping with sitemap generation.
1.1 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

1.1.1 Requirements

Flask-Sitemap has the following dependencies:

- Flask
- blinker
- six

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

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/.

1.2.1 Simple Example

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

```python
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.

1.2.2 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.

1.2.3 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.

```python
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)

1.3 Configuration

The details of the application settings that can be customized.

1.3.1 SITEMAP_URL_METHOD

Default: http.

1.3.2 SITEMAP_BLUEPRINT

If None or False then the Blueprint is not registered.
Default: flask_sitemap.

1.3.3 SITEMAP_GZIP

Default: False.

1.3.4 SITEMAP_BLUEPRINT_URL_PREFIX

Default: /.

1.3.5 SITEMAP_ENDPOINT_URL

Return sitemap index or sitemap for pages with less than SITEMAP_MAX_URL_COUNT urls.
Default: sitemap.xml.
1.3.6 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

1.3.7 SITEMAP_INCLUDE_RULES_WITHOUT_PARAMS

Default: False.

1.3.8 SITEMAP_IGNORE_ENDPOINTS

Default: None.

1.3.9 SITEMAP_VIEW_DECORAROS

Default: [].

1.3.10 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.

1.4 API

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

1.4.1 Flask-Sitemap

Flask-Sitemap generates an application sitemap.xml.

Initialization of the extension:

```python
>>> from flask import Flask
>>> from flask_sitemap import Sitemap

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

or alternatively using the factory pattern:

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

**class flask_sitemap.Sitemap (app=None)**

Flask extension implementation.
gzip_response (data)
GZip response data and create new Response instance.

init_app (app)
Initialize a Flask application.

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)
Standard XML response.

1.5 Changelog

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

Version 0.1 (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)

1.6 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:
Flask-Sitemap Documentation, Release 0.1.0

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

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1.8 Authors

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

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