
bootstrap-py Documentation

Release 0.7.0

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Bootstrap Python Package

The `bootstrap-py` provides generating the Python packages.

1.1 Status



1.2 Requirements

- Python 3.5 over

1.3 Features

- Generating Python package.
- Checking Python package name existence at PyPI.
- Test and conde checking environment is configured with the [Tox](#), [Pytest](#), and others.
 - [pycodestyle](#)
 - [pytest-cov](#)
 - [pytest-flakes](#)
 - [Pylint](#)
 - [pydocstyle](#)
- Generating documentation automatically with the [Sphinx](#).
- Configuration Git repository, initial commit.

- Generate sample code using `--with-samples` option.

1.4 Usage

1.4.1 Install bootstrap-py

Install bootstrap-py:

```
$ virtualenv venv
$ . venv/bin/activate
(venv)$ python -m pip install bootstrap-py
```

1.4.2 Generate Python package

Generate your Python package.:

```
(venv)$ bootstrap-py create -a 'Your author name' -e 'your-author-email@example.org' \
-u 'https://your-package-website.example.org' -o '/path/to/package-dir' \
-l 'select-the-license' 'your-package-name'
(venv)$ deactivate
$ cd /path/to/package-dir
$ ls
MANIFEST.in  docs      pytest.ini  setup.py    utils
README.rst   libneta  setup.cfg   tox.ini
```

1.4.3 List license choices

List license description choices.:

```
(venv)$ bootstrap-py list -l
GPL          : GNU General Public License (GPL)
CPL          : Common Public License
IOSL        : Intel Open Source License
GPLv3+      : GNU General Public License v3 or later (GPLv3+)
(omit)
```

1.4.4 Using tox

Running test with tox:

```
$ pip install --user tox
$ tox
(omit)

_____ summary _____
py35: commands succeeded
py36: commands succeeded
pycodestyle: commands succeeded
pydocstyle: commands succeeded
docs: commands succeeded
congratulations :)
```


`bootstrap_py.control.`

`bootstrap_py.control.retrieve_metadata()`
Retrieve metadata.

Return type *bootstrap_py.classifiers.Classifiers*

Returns `Classifiers()`

`bootstrap_py.control.print_licences(params, metadata)`
Print licenses.

Parameters

- **params** (*argparse.Namespace*) – parameter
- **metadata** (*bootstrap_py.classifier.Classifiers*) – package metadata

`bootstrap_py.control.check_repository_existence(params)`
Check repository existence.

Parameters **params** (*argparse.Namespace*) – parameters

`bootstrap_py.control.check_package_existence(params)`
Check package existence.

Parameters **params** (*argparse.Namespace*) – parameters

`bootstrap_py.control.generate_package(params)`
Generate package repository.

Parameters **params** (*argparse.Namespace*) – parameters

`bootstrap_py.package.`

class `bootstrap_py.package.PackageData(args)`
Bases: `object`

Package meta data class.

```
default_version = '0.1.0'  
    Configured the default “version” of setup.setup().  
  
warning_message = '##### ToDo: Rewrite me #####'  
    Users should rewrite parameters after they generate Python package.  
  
to_dict ()  
    Convert the package data to dict.
```

```
class bootstrap_py.package.PackageTree (pkg_data)  
    Bases: object  
  
    Package directory tree class.  
  
template_name = 'bootstrap_py'  
    Jinja2 template name  
  
suffix = '-bootstrap-py'  
    the suffix name of working directory for generating  
  
init = '__init__.py'  
    init filename  
  
exec_perm = 493  
    default permission  
  
pkg_dirs = ['{module_name}', '{module_name}/tests']  
    include directories to packages  
  
move ()  
    Move directory from working directory to output directory.  
  
clean ()  
    Clean up working directory.  
  
generate ()  
    Generate package directory tree.  
  
vcs_init ()  
    Initialize VCS repository.
```

bootstrap_py.classifiers.

```
class bootstrap_py.classifiers.Classifiers  
    Bases: object  
  
    Classifiers.  
  
url = 'https://pypi.python.org/pypi?%3Aaction=list_classifiers'  
    list_classifiers url  
  
prefix_status = 'Development Status :: '  
    prefix status  
  
prefix_lic = 'License :: OSI Approved :: '  
    prefix licences  
  
status ()  
    Development status.  
  
licenses ()  
    OSI Approved license.  
  
licenses_desc ()  
    Remove prefix.
```

bootstrap_py.docs.

bootstrap_py.docs.**build_sphinx** (*pkg_data*, *projectdir*)
Build sphinx documentation.

Return type int

Returns subprocess.call return code

Parameters

- **pkg_data** (*bootstrap_py.control.PackageData*) – package meta data
- **projectdir** (*str*) – project root directory

bootstrap_py.pypi.

bootstrap_py.pypi.**PYPI_URL** = 'https://pypi.org/pypi/{0}/json'
PyPI JSONC API url

bootstrap_py.pypi.**package_existent** (*name*)
Search package.

- *bootstrap_py.exceptions.Conflict* exception occurs when user specified name has already existed.
- *bootstrap_py.exceptions.BackendFailure* exception occurs when PyPI service is down.

Parameters **name** (*str*) – package name

bootstrap_py.vcs.

class bootstrap_py.vcs.**VCS** (*repo_dir*, *metadata*)
Bases: object
VCS class.

bootstrap_py.exceptions.

exception bootstrap_py.exceptions.**Error**
Bases: Exception
Base error class.

with_traceback ()
Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.

exception bootstrap_py.exceptions.**NotFound**
Bases: *bootstrap_py.exceptions.Error*
Not Found.

with_traceback ()
Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.

exception bootstrap_py.exceptions.**Conflict**
Bases: *bootstrap_py.exceptions.Error*
Conflict.

with_traceback ()
Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.

exception bootstrap_py.exceptions.**BackendFailure**
Bases: *bootstrap_py.exceptions.Error*

PyPI service down.

with_traceback()

Exception.with_traceback(tb) – set self.__traceback__ to tb and return self.

3.1 0.7.0 (2018-11-03)

- Fixes package_existent for the new PyPI API.
- Updates templates.
- Fixes pylint violations.
- Unsupports Python 2.x and PyPy (compatible Python 2.7).
- Supports Python 3.7.
- Fixes handling empty command without arguments. (Thanks @sourcepirate)

3.2 0.6.0 (2016-06-08)

- Uses pycodestyle instead of pep8.

3.3 0.5.1 (2016-05-17)

- Adds `--doctest-modules` option.
- Fixes pylint option argument.
- Removes doctest exception sample.

Changes follows when enable doctest-modules.:

```
diff --git a/pytest.ini b/pytest.ini
index 635a7f9..15cc929 100644
--- a/pytest.ini
+++ b/pytest.ini
```

(continues on next page)

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```
@@ -7,6 +7,7 @@ addopts =
    --cov your_package_name
    --cov-report=term
    --cov-report=html
+   --doctest-modules
  pep8ignore =
    setup.py ALL
    docs/source/conf.py ALL
diff --git a/tox.ini b/tox.ini
index 141d468..b8c1f32 100644
--- a/tox.ini
+++ b/tox.ini
@@ -10,7 +10,7 @@ envlist =

  [testenv]
  commands =
-   py.test --pylint --pylint-rcfile={toxinidir}/.pylintrc
+   py.test --pylint --pylint-rcfile={toxinidir}/.pylintrc your_package_name

  [py]
  deps=
```

3.4 0.5.0 (2016-05-07)

- Adds `--with-samples` options; generating sample code.
- Fixes bugs module name when package name includes hyphen.
- Fixes comparing version bug in updatable for Python3.
- Some refactorings.

3.5 0.4.8 (2016-04-25)

- Fixes warning of build sphinx without `docs/source/_static` directory.
- Unsupports IP address url.

3.6 0.4.7 (2016-04-24)

- Adds url validator.
- Adds long description checker.

3.7 0.4.6 (2016-04-21)

- Fixes `.travis.yml` template.

Generated package with v0.4.5 or less that has bugs `.travis.yml` configuration file. Modify the follows manually.:

```
diff --git a/.travis.yml b/.travis.yml
index ab128da..600125e 100644
--- a/.travis.yml
+++ b/.travis.yml
@@ -14,6 +14,11 @@ after_success:
     - coveralls --verbose

matrix:
+ allow_failures:
+   - env: TOX_ENV=py27
+   - env: TOX_ENV=py33
+   - env: TOX_ENV=py34
+   - env: TOX_ENV=pypy
include:
- python: 3.5
-   env: TOX_ENV=py35
+ python: 3.5
+   env: TOX_ENV=py35
```

3.8 0.4.5 (2016-04-06)

- Fixes tox.ini template.

Generated package with v0.4.4 or less that has bugs tox.ini configuration file. Modify the follows manually.

- Fixes *your_package_name* with snake case. Modify the follows manually.:

```
diff --git a/tox.ini b/tox.ini
index a9d823f..db825cc 100644
--- a/tox.ini
+++ b/tox.ini
@@ -49,7 +49,7 @@ basepython = pypy
[testenv:pep257]
deps=
    pep257
-commands = pep257 bootstrap_py
+commands = pep257 your_package_name
basepython = python3.5

[testenv:docs]
```

3.9 0.4.4 (2016-04-05)

- Adds symlink to pre-commit hook.

Generated package with v0.4.3 or less that has bugs pre-commit hook script. Modify the follows manually.:

```
$ chmod +x utils/pre-commit
$ ln -s ../../utils/pre-commit .git/hooks/pre-commit
```

3.10 0.4.3 (2016-04-04)

- Fixes pre-commit hook script permission.

3.11 0.4.2 (2016-03-08)

- Fixes configuratuon version, release.
- Fixes url, author_email in setup.py.

Generated package with v0.4.1 or less that has bugs Sphinx documentation. Modify the follows manually.

- Fixes docs/source/index.rst:

```
diff --git a/docs/source/index.rst b/docs/source/index.rst
index b3404ac..d8bdc83 100644
--- a/docs/source/index.rst
+++ b/docs/source/index.rst
@@ -16,8 +16,8 @@ Contents:

    CHANGELOG

- Indices and tables
- =====
+Indices and tables
+=====

* :ref:`genindex`
* :ref:`modindex`
```

- Renames docs/source/README to docs/source/README.rst.
- Fixes documentation version in docs/source/conf.py.
- Fixes auth_email, url in setup.py.

3.12 0.4.1 (2016-03-07)

- Adds exception handler package update.
- Fixes some docstring.

3.13 0.4.0 (2016-03-07)

- Adds checking latest version.
- Fixes Sphinx template bugs.
- Does some refactoring.

3.14 0.3.0 (2016-02-21)

- git init and initial commit.
- Adds `--no-check` option.
- Fixes list subcommand.

3.15 0.2.1 (2016-02-16)

- Fixes failing create sub-command.

3.16 0.2.0 (2016-02-15)

- Adds create, list sub-command.
 - “create”: generating Python package.
 - “list”: Print license description for choices.
- Changes mutually exclusive group; username, url options.
- Add checking package name in PyPI.
- Adds some exception handling.

3.17 0.1.1 (2016-02-02)

- Fixes README template

3.18 0.1.0 (2016-02-02)

- First release

CHAPTER 4

Indices and tables

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