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# **Python Restorable Collections Documentation**

***Release 1.0.0***

**Alexis Petrounias**

**Sep 27, 2017**



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Pickleable wrappers for Python collections with non-built-in type keys and cycles or self-references.

Interfaces to `collections` which solve the problem of unpickleable objects when non-built-in type keys are used and form cycles, either mutually or through self-reference.

A detailed article explaining the problem and this solution will soon be available at: <http://www.petrounias.org/articles/>



# CHAPTER 1

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## Prerequisites

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Core:

- Python  $\geq 2.7$



## CHAPTER 2

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### Obtaining

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- Author's website for the project: <http://www.petrounias.org/software/python-restorable-collections/>
- Git repository on GitHub: <https://github.com/petrounias/python-restorable-collections/>
- Mercurial repository on BitBucket: <http://www.bitbucket.org/petrounias/python-restorable-collections/>



## CHAPTER 3

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### Installation

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Via setup tools:

```
python setup.py install
```

Via pip and pypi:

```
pip install python-restorable-collections
```



## CHAPTER 4

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### Usage

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Import the collections wrappers from the `restorable_collections` module.

```
from restorable_collections import RestorableDict
```

and use it instead of the corresponding Python object:

```
self.foo = RestorableDict()  
self.foo[self] = 42
```



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## Table of Contents

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### Module `restorable_collections`

The module `restorable_collections_tests` contains all unit tests associated with this module.

Contents:

- *Restorable*
- *RestorableDict*
- *RestorableDefaultDict*
- *RestorableOrderedDict*
- *RestorableSet*

**Restorable**

**RestorableDict**

**RestorableDefaultDict**

**RestorableOrderedDict**

**RestorableSet**



## CHAPTER 6

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### Release Notes

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- v1.0.0 @ 7 Sep 2014 Initial public release.



## CHAPTER 7

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### Development Status

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Actively developed and maintained since 2014. Currently used in production in proprietary projects by the author and his team, as well as other third parties.



## CHAPTER 8

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### Future Work

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- Support for non-standard collections, specifically `OrderedSet` and `OrderedDefaultDict`.



## CHAPTER 9

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### Contributors

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Written and maintained by Alexis Petrounias < <http://www.petrounias.org/> >. Additional testing by Anastasia Niarchou < <http://www.niarchou.org/> > and Andreas Protopapas < <http://www.protopapas.co/> >.



## CHAPTER 10

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# CHAPTER 11

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## Indices and tables

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- `genindex`
- `modindex`
- `search`