
atomic Documentation

Release 0.3

Timothee Peignier

May 06, 2012

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An atomic class that guarantees atomic updates to its contained value.
You can report bugs and discuss features on the [issues page](#).

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1.1 Installation

1. Either check out Atomic from [GitHub](#) or to pull a release off [PyPI](#)

```
pip install atomic
```

1.2 Usage

class `atomic.Atomic` (*value=None*)

An atomic class that guarantees atomic updates to its contained value.

compare_and_set (*expect_value, new_value*)

Atomically sets the value to the given value if the current value is equal to the expected value.

Parameters

- **expect_value** – the expected value
- **new_value** – the new value

get_and_set (*new_value*)

Atomically sets to the given value and returns the old value

Parameters **new_value** – the new value

try_update (*update_func*)

Update value based on the given function.

If the value changes before the update can happen, it will raise a `ConcurrentUpdateException`.

Parameters **update_func** (*func*) – a function that given the current value return the new value

Raises `ConcurrentUpdateException`

update (*update_func*)

Update value based on the given function.

It may run the block repeatedly if there are other concurrent updates in progress.

Parameters **update_func** (*func*) – a function that given the current value return the new value

value

Get and set current value

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`atomic, ??`