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# **AnyBlok Multi Engines Documentation**

***Release 1.0.1***

**Jean-Sébastien Suzanne**

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Information about the AnyBlok Multi Engines project.

## Project Homepage

AnyBlok is hosted on [github](#) - the main project page is at [https://github.com/AnyBlok/AnyBlok\\_Multi\\_Engines](https://github.com/AnyBlok/AnyBlok_Multi_Engines). Source code is tracked here using [GIT](#).

Releases and project status are available on Pypi at [http://pypi.python.org/pypi/anyblok\\_multi\\_engines](http://pypi.python.org/pypi/anyblok_multi_engines).

The most recent published version of this documentation should be at <http://doc.anyblok-multi-engines.anyblok.org>.

## Project Status

AnyBlok multi engines is currently in beta status and is expected to be fairly stable. Users should take care to report bugs and missing features on an as-needed basis. It should be expected that the development version may be required for proper implementation of recently repaired issues in between releases;

## Installation

Install released versions of AnyBlok from the Python package index with [pip](#) or a similar tool:

```
pip install anyblok_multi_engines
```

Installation via source distribution is via the `setup.py` script:

```
python setup.py install
```

## Unit Test

Run the test with `nose`:

```
pip install nose
nosetests anyblok_multi_engines/tests
```

## Dependencies

AnyBlok works with **Python 3.3** and later. The install process will ensure that [AnyBlok](#), in addition to other dependencies. The latest version of them is strongly recommended.

## Author

Jean-Sébastien Suzanne

## Contributors

[Anybox](#) team:

- Jean-Sébastien Suzanne

## Bugs

Bugs and feature enhancements to AnyBlok should be reported on the [Issue tracker](#).

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- *AnyBlok Multi Engines framework*
  - *Registry plugin*
    - \* *Session*
    - \* *Mixin of the registry*
    - \* *Plugin class*
  - *get\_url plugin*



## Registry plugin

### Session

**class** anyblok\_multi\_engines.registry.**MixinSession**

Bases: object

Mixin for the SQLAlchemy session the goal is to allow the connection with more than one engine: masters / slaves engines

**get\_bind** (*mapper=None, clause=None*)

Overload the `Session.get_bind` method of SQLAlchemy

the rule are:

- if `unittest_transaction`: durring unittest, they are no slaves / masters
- if `flushing`: write on the database then we use the master
- read the database then use a slave

### Mixin of the registry

**class** anyblok\_multi\_engines.registry.**MultiEngines**

Bases: object

Mixin class which overload the AnyBlok Registry class

the goal is to implement in the the Registry the masters / slaves behaviour

**bind**

Return the bind in function of engine

**close** ()

Overwrite close to cloe all the engines

**create\_session\_factory()**

Overwrite the creation of Session factory to Use the multi binding

**engine**

Return the engine

**get\_engine\_for(ro=True)**

Return one engine among the engines

**Parameters** **ro** – if True the engine will be read only else write only

**Return type** engine

**Exception** RegistryException

**init\_bind()**

Initialise the bind for unittest

**init\_engine(db\_name=None)**

Overload the initiation of engine to create more than one engine

use the Configuration option to create engines:

- **db\_url**: read and write engine
- **db\_ro\_urls**: read only engines (list)
- **db\_wo\_url**: write only engines

**Warning:** All the engines use the same database name not at the same location

**Parameters** **db\_name** – name of the database for the engines

## Plugin class

```
class anyblok_multi_engines.registry.RegistryMultiEngines(db_name, loadwith-  
outmigration=False,  
unittest=False, **kwargs)  
    Bases: anyblok_multi_engines.registry.MultiEngines, anyblok.registry.Registry  
    Plugging class
```

## get\_url plugin

**anyblok\_multi\_engines.config.get\_url(db\_name=None, url=None)**

Return an sqlalchemy URL for database

**Parameters**

- **db\_name** – Name of the database
- **url** – base of the url

**Return type** SQLAlchemy URL

**Exception** ConfigurationException

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- [\*ROADMAP\*](#)



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### ROADMAP

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  - *1.0.1 (2017-10-08)*
  - *1.0.0 (2016-07-13)*



### 1.0.1 (2017-10-08)

- [FIX] doc
- [FIX] use a better way to install blok wich inherit Query or Session

### 1.0.0 (2016-07-13)

- [IMP] PPlugin Registry and get\_url for master(s) / slave(s) engines
- [ADD] doc
- [IMP] unittest

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