
AnyBlok Multi Engines Documentation

Release 1.0.0

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Front Matter

Information about the AnyBlok Multi Engines project.

1.1 Project Homepage

AnyBlok is hosted on [github](https://github.com/AnyBlok/AnyBlok_Multi_Engines) - the main project page is at 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.

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

1.2 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;

1.3 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
```

1.4 Unit Test

Run the test with `nose`:

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

1.5 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.

1.6 Author

Jean-Sébastien Suzanne

1.7 Contributors

[Anybox](#) team:

- Jean-Sébastien Suzanne

1.8 Bugs

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

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AnyBlok Multi Engines framework

2.1 Registry plugin

2.1.1 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 has session_connection: use the session_connection, because it use during the creation of the AnyBlok Registry, which need get the same bind
- 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

2.1.2 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

2.1.3 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

2.2 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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CHANGELOG

4.1 1.0.0 (2016-07-13)

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