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# **state***\_machine\_db*Documentation

**Release 0.1**

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`state_machine_db` provides the implementation of a recoverable (sqlite3) state machine

### Example

```
>>> import logging
>>> logging.basicConfig()
>>> from state_machine_db import StateMachine
>>> st = StateMachine('/tmp/db.sqlite', 'first')
>>> st.logger.setLevel('DEBUG')
>>> st.start()
>>> st.update_flag = True
```

### Installation

To install `state_machine`, simply run:

```
$ pip install state_machine_db
```

`state_machine_db` is compatible with Python 2.6+ and python 3

### Documentation

[https://state\\_machine\\_db.readthedocs.io](https://state_machine_db.readthedocs.io)

## Source Code

Feel free to fork, evaluate and contribute to this project.

Source: [https://github.com/jonDel/state\\_machine\\_db](https://github.com/jonDel/state_machine_db)

## License

GPLv3 licensed.

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state\_machine\_db package contents:

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### state\_machine\_db package

#### Submodules

#### state\_machine\_db.state\_machine module

This module implements a state machine that waits for flags to jump from state to state until it is finished

**class** `state_machine_db.state_machine.StateMachine` (*sm\_database\_path*, *activity\_id*)  
Bases: `threading.Thread`

Implements a totally configurable state machine

##### Parameters

- **sm\_database\_path** (*str*) – path to the sqlite database
- **activity\_id** (*str*) – identifier for the current state machine instance

**static check\_if\_thread\_alive** (*activity\_id*)  
Checks if there is a thread related to *activity\_id*

**Parameters** **activity\_id** (*str*) – identifier for the current state machine instance

**Returns** True if there is a thread, False otherwise

**static get\_sm\_alive\_threads** ()  
Get info about all running threads related to state machine

**Returns** A dictionary containing the name of each running thread and its thread object

**get\_updated\_states** ()  
This method must be implemented in the child class and return, after an update in the `update_flag`, a list of updated states

**run ()**

Initiates the thread that effectively implements the state machine. A change of state must be signaled by a flag (update, must be True) The final state must be signaled by a flag (is\_finished, must be True)

## Module contents



## CHAPTER 3

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