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# Flask-CQLAlchemy Documentation

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## Contents

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<b>1 Installation</b>	<b>3</b>
<b>2 Dependencies</b>	<b>5</b>
<b>3 Example</b>	<b>7</b>
<b>4 Usage</b>	<b>9</b>
<b>5 Configuration Options</b>	<b>11</b>
<b>6 API</b>	<b>13</b>



Flask-CQLAlchemy handles connections to Cassandra clusters and gives a unified easier way to declare models and their columns



# CHAPTER 1

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## Installation

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```
$ pip install flask-cqlalchemy
```



# CHAPTER 2

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## Dependencies

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As such Flask-CQLAlchemy depends only on the cassandra-driver. It is assumed that you already have flask installed. Flask-CQLAlchemy has been tested with versions 2.6.0, 2.7.2, 3.0.0, 3.1.0, 3.1.1, 3.2.0 and 3.2.1 of cassandra-driver. It is known to work with all versions  $\geq 2.5$ , but use it at your own risk. All previous versions of Flask-CQLAlchemy are deprecated.



# CHAPTER 3

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## Example

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```
#example_app.py
import uuid
from flask import Flask
from flask.ext.cqlalchemy import CQLAlchemy

app = Flask(__name__)
app.config['CASSANDRA_HOSTS'] = ['127.0.0.1']
app.config['CASSANDRA_KEYSPACE'] = "cqlengine"
db = CQLAlchemy(app)

class User(db.Model):
    uid = db.columns.UUID(primary_key=True, default=uuid.uuid4)
    username = db.columns.Text(required=False)
```



# CHAPTER 4

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## Usage

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Start a python shell

```
>>from example_app import db, User  
>>db.sync_db()  
>>user1 = User.create(username='John Doe')
```

For a complete list of available method refer to the [cqlengine Model documentation](#)



# CHAPTER 5

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## Configuration Options

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CQLAlchemy provides all the option available in the `cqlengine connection.setup()` method

- `CASSANDRA_HOSTS` - A list of hosts
- `CASSANDRA_KEYSPACE` - The default keyspace to use
- `CASSANDRA_CONSISTENCY` - The global default ConsistencyLevel
- `CASSANDRA_LAZY_CONNECT` - True if should not connect until first use
- `CASSANDRA_RETRY_CONNECT` - True if we should retry to connect even if there was a connection failure initially
- `CASSANDRA_SETUP_KWARGS` - Pass-through keyword arguments for Cluster()



# CHAPTER 6

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## API

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CQLAlchemy provides some helper methods for Cassandra database management

`sync_db()` - Creates/Syncs all the tables corresponding to the models declared in the application

`set_keyspace()` - Sets the keyspace for a session. Keyspaces once set will remain the default keyspace for the duration of the session. If the change is temporary, it must be reverted back to the default keyspace explicitly.