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# **cryptbase**

***Release 1.0.0***

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## OVERVIEW

Protect yourself and your customers with database encryption.

- Free software: MIT license

### 1.1 Installation

```
pip install cryptbase
```

### 1.2 Usage

You can use cryptbase with django ORM or with SQLAlchemy.

To use with SQLAlchemy:

```
from cryptbase import EncryptedText sensitive = Column(EncryptedText(key=DB_KEY))
```

To use with django:

```
from cryptbase import EncryptedTextField sensitive = EncryptedTextField(key=DB_KEY)
```

DB\_KEY is 32 bytes encryption key as hex encoded string. Fields behave as TEXT fields, data are transparently encrypted when storing into the database and decrypted on retrieval.

### 1.3 Development

To run all the tests run:

```
tox
```



## INSTALLATION

At the command line:

```
pip install cryptbase
```





## **USAGE**

You can use cryptbase with django ORM or with SQLAlchemy.

To use with SQLAlchemy:

```
from cryptbase import EncryptedText sensitive = Column(EncryptedText(key=DB_KEY))
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To use with django:

```
from cryptbase import EncryptedTextField sensitive = EncryptedTextField(key=DB_KEY)
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DB\_KEY is 32 bytes encryption key as hex encoded string. Fields behave as TEXT fields, data are transparently encrypted when storing into the database and decrypted on retrieval.



**REFERENCE**

**4.1 cryptbase**



## CONTRIBUTING

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given.

### 5.1 Bug reports

When [reporting a bug](#) please include:

- Your operating system name and version.
- Any details about your local setup that might be helpful in troubleshooting.
- Detailed steps to reproduce the bug.

### 5.2 Documentation improvements

cryptbase could always use more documentation, whether as part of the official cryptbase docs, in docstrings, or even on the web in blog posts, articles, and such.

### 5.3 Feature requests and feedback

The best way to send feedback is to file an issue at <https://code.eghuro.com/cryptbase/python-cryptbase/issues>.

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.
- Remember that this is a volunteer-driven project, and that code contributions are welcome :)

## 5.4 Development

To set up *python-cryptbase* for local development:

1. Fork [python-cryptbase](#) (look for the “Fork” button).
2. Clone your fork locally:

```
git clone git@code.eghuro.com:YOURGITHUBNAME/python-cryptbase.git
```

3. Create a branch for local development:

```
git checkout -b name-of-your-bugfix-or-feature
```

Now you can make your changes locally.

4. When you’re done making changes run all the checks and docs builder with [tox](#) one command:

```
tox
```

5. Commit your changes and push your branch to GitHub:

```
git add .  
git commit -m "Your detailed description of your changes."  
git push origin name-of-your-bugfix-or-feature
```

6. Submit a pull request through the GitHub website.

### 5.4.1 Pull Request Guidelines

If you need some code review or feedback while you’re developing the code just make the pull request.

For merging, you should:

1. Include passing tests (run `tox`).
2. Update documentation when there’s new API, functionality etc.
3. Add a note to `CHANGELOG.rst` about the changes.
4. Add yourself to `AUTHORS.rst`.

### 5.4.2 Tips

To run a subset of tests:

```
tox -e envname -- pytest -k test_myfeature
```

To run all the test environments in *parallel*:

```
tox -p auto
```

## AUTHORS

- Alexandr Mansurov - <https://eghuro.cz>





## CHANGELOG

### 7.1 1.0.0 (2021-10-17)

- Encrypted text field for Django and SQLAlchemy with AES-256-CTR



## INDICES AND TABLES

- `genindex`
- `modindex`
- `search`



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