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# **atsphinx-sqlite3fts**

***Release 0.1.3***

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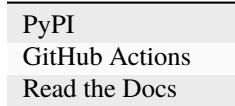
**Oct 25, 2023**



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`atsphinx-sqlite3fts` is sphinx extension to provide some components.

- Full-text search database by FTS5
- Custom HTML to search by user

This is experimental package. It implements minimum works and provide only minimum configurations.



## GETTING STARTED

### 1.1 Requirements

- Python 3.7+
  - You can see requirement packages from `pyproject.toml`.
- SQLite 3.34.0+

### 1.2 Installation

This is published on PyPI.

```
pip install atsphinx-sqlite3fts
```

If you want to try latest source, install from GitHub.

```
pip install git+https://github.com/atsphinx/sqlite3fts.git
```

### 1.3 Usage

At first, configuration on `conf.py` of your documentation.

```
extensions = [  
    "atsphinx.sqlite3fts",  
]  
  
# Set if you want to use for HTML search  
sqlite3fts_use_search_html = True
```

### 1.3.1 Try search by local database

You can build database by sqlite builder.

```
make sqlite  
sqlite3 _build/sqlite/db.sqlite
```

```
sqlite> SELECT * FROM content MATCH "installation";
```

See *Database specification*.

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CHAPTER  
TWO

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## CONFIGURATION

### `sqlite3fts_exclude_pages`

**Type**

`List[str]`

**Default**

`[]`

**Example**

`["index", "404"]`

List of documents that are excluded for target of register database. This should be used when some documents need not be searched.

Value must be **docname**, not filename. If you want to exclude `index.rst`, you should set `index`.

### `sqlite3fts_use_search_html`

**Type**

`bool`

**Default**

`False`

**Example**

`True`

Use custom search page.

If you set `True` for this, `atsphinx-sqlite3fts` does these.

- Override JavaScript file for search.
- Change style to display search results.



## DATABASE SPECIFICATION

This is writing about specification of generated database.

### 3.1 Base

Using SQLite and FTS5 extension. Details are described in [SQLite website](#).

atsphinx-sqlite3fts run these strategy.

- Use `trigram` tokenizer to search Japanese text (not work with `unicode61`).
- Split document table and searching virtual table (document has page that is not target of search).

### 3.2 Tables

atsphinx-sqlite3fts use peewee to manage database schemas.

#### 3.2.1 document table

This table contains all of property for refer to documents.

#### 3.2.2 section table

This table contains all of property for refer to section of documents.

#### 3.2.3 content table

This table is registered only targets of full-text searching. Currently, this contains title and body of documents.  
body is plain text to pick all text contents from doctree.

### **3.2.4 Relation**

- `section.document_id` is as foreign key to `document.id`.
- `document-fts.rowid` is as foreign key to `section.id`.

You can use JOIN statement some tables.

## SIMPLE CLI TOOL

`atsphinx-sqlite3fts` provides simple CLI tool to display result of searching.

### 4.1 Requirements

If you want to use CLI tool, it need Click library. You can insall `atsphinx-sqlite3fts` with extra packages.

```
pip install 'atsphinx-sqlite3fts[cli]'
```

### 4.2 Usage example

Before run CLI, build database by `sphinx-build`.

```
sphinx-build -b sqlite . _build
```

To search from database, run command with path of database and keyword.

```
atsphinx-sqlite3fts _build/db.sqlite Hello

cli-tool
    Simple CLI tool

getting-started
    Getting started
```

Command display pagename and title.



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**CHAPTER  
FIVE**

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**CHANGELOGS**



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CHAPTER  
SIX

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## LATEST CHANGES

### 6.1 v0.1.3

**date**  
2023-10-26

(Not featured release)

#### 6.1.1 Misc

- Fix to upload into GitHub Releases.
- Fix release-date of v0.1.2

### 6.2 v0.1.2

**date**  
2023-10-26

#### 6.2.1 Important

- Rename from `sphinx-sqlite3fts`

#### 6.2.2 Fixes

- Ref content-root when using Sphinx>=7.2

### 6.3 v0.1.1

**date**  
2022-11-28

Small bug-fixes.

### 6.3.1 Fixes

- Force override `searchindex.js` as blank file.
- `searchtools.js` initialize engine lazy.

## 6.4 v0.1.0

**date**

2022-11-27

For JavaScript based search-engine.

### 6.4.1 Features

- Split sections from document for search (useful for refs of page).
- Add flag: search from database instead of Sphinx bundled search feature.

## 6.5 v0.0.3

**date**

2022-11-26

Update documents

### 6.5.1 Documentation

- Add badges into readme and documentation.
- Follow notes for v0.0.2

## 6.6 v0.0.2

**date**

2022-11-23

Supporting for local development.

### 6.6.1 Miscellaneous

- Use `bump2version` for release.
- Configure about line-length for `pycodestyle`.

## 6.7 v0.0.1

### **date**

2022-11-23

This is first release.

### 6.7.1 Features

- Add `sqlite` builder that generate db.sqlite.
- Inject generator for database into `html` based builder.



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