# anysearch Documentation

*Release 0.1*

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`AnySearch` is a `Elasticsearch` and `OpenSearch` compatibility library. It provides utility functions for smoothing over the differences between the Python libraries with the goal of writing Python code that is compatible on both (including the `*search` and `*search-dsl` packages).

See the documentation for more information on what is provided.

CHAPTER

ONE

# DOCUMENTATION

Documentation is available on Read the Docs.

CHAPTER

TWO

# PREREQUISITES

- Python 3.6, 3.7, 3.8, 3.9 and 3.10.

CHAPTER

THREE

# INSTALLATION

Install latest stable version from PyPI:

```
pip install anysearch
```

or latest stable version from GitHub:

```
pip install https://github.com/barseghyanartur/anysearch/archive/main.tar.gz
```

CHAPTER

FOUR

# CONFIGURATION

AnySearch automatically detects whether you use Elasticsearch or OpenSearch by looking at which packages are installed. However, if you have both packages installed, you can instruct AnySearch which one do you actually want to use. The way to do that is to set the ANYSEARCH_PREFERRED_BACKEND environment variable to either Elasticsearch or OpenSearch.

For Elasticsearch:

```
import os
os.environ.setdefault("ANYSEARCH_PREFERRED_BACKEND", "Elasticsearch")
```

For OpenSearch:

```
import os
os.environ.setdefault("ANYSEARCH_PREFERRED_BACKEND", "OpenSearch")
```

CHAPTER

FIVE

# USAGE

## 5.1 elasticsearch/opensearch

### 5.1.1 How-to

With elasticsearch you would do:

```
from elasticsearch import Connection, Elasticsearch
```

With opensearch you would do:

```
from opensearch_py import Connection, OpenSearch
```

With anysearch you would change that to:

```
from anysearch.search import Connection, AnySearch
```

## 5.2 elasticsearch-dsl/opensearch-dsl

### 5.2.1 How-to

With elasticsearch-dsl you would do:

```
from elasticsearch_dsl import AggsProxy, connections, Keyword
from elasticsearch_dsl.document import Document
```

With opensearch-dsl you would do:

```
from opensearch_dsl import AggsProxy, connections, Keyword
from opensearch_dsl.document import Document
```

With anysearch you would change that to:

```
from anysearch.search_dsl import AggsProxy, connections, Keyword
from anysearch.search_dsl.document import Document
```

CHAPTER

SIX

# TESTING

Project is covered with tests.

To test with all supported Python versions type:

```
tox
```

To test against specific environment, type:

```
tox -e py39
```

To test just your working environment type:

```
pytest
```

To run a single test in your working environment type:

```
pytest test_anysearch.py
```

To run a single test class in a given test module in your working environment type:

```
pytest test_anysearch.py::AnySearchTestCase
```

It's assumed that you have either `elasticsearch-dsl` or `opensearch-dsl` installed. If not, install the requirements first.

CHAPTER

SEVEN

# WRITING DOCUMENTATION

Keep the following hierarchy.

```
=====
title
=====

header
======

sub-header
----------

sub-sub-header
~~~~~~~~~~~~~~

sub-sub-sub-header
^^^^^^^^^^^^^^^^^^

sub-sub-sub-sub-header
++++++++++++++++++++++

sub-sub-sub-sub-sub-header
**************************
```

CHAPTER

EIGHT

# LICENSE

MIT

CHAPTER

NINE

# SUPPORT

For any security issues contact me at the e-mail given in the *Author* section. For overall issues, go to GitHub.

CHAPTER

TEN

# AUTHOR

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CHAPTER

ELEVEN

# DOCUMENTATION

Contents:

## 11.1 Release history and notes

Sequence based identifiers are used for versioning (schema follows below):

```
major.minor[.revision]
```

- It's always safe to upgrade within the same minor version (for example, from 0.3 to 0.3.4).
- Minor version changes might be backwards incompatible. Read the release notes carefully before upgrading (for example, when upgrading from 0.3.4 to 0.4).
- All backwards incompatible changes are mentioned in this document.

### 11.1.1 0.2.2

2022-12-28

- Added more attributes to the `search_dsl` module.
- Tested against Python 3.11.
- Stop testing against Python 3.6 (due to GitHub CI difficulties).

### 11.1.2 0.2.1

2022-07-31

- Added some of the missing attributes to the `search_dsl` module.

### 11.1.3 0.2

2022-07-27

- Dropped support for `Django` integration packages. Support for both `Elasticsearch` and `OpenSearch` will either be built in the `django-elasticsearch-dsl` package or a (rebranded) fork of it.

### 11.1.4 0.1.7

2022-07-26

- Improved `elasticsearch-py/opensearch-py` support.

### 11.1.5 0.1.6

2022-07-25

- Documentation fixes.
- More tests.

### 11.1.6 0.1.5

2022-07-24

Loosen Python requirements to allow Python 3.6 installations. Note, that although package is not "officially" tested with Python 3.6, it has been tested locally.

### 11.1.7 0.1.4

2022-07-24

- Improved Django support.

### 11.1.8 0.1.3

2022-07-22

- Better support of `elasticsearch/opensearch`.

### 11.1.9 0.1.2

2022-07-21

- Minor Python 3.7 and 3.8 fixes.

### 11.1.10 0.1.1

2022-07-21

- Minor improvements.
- Add docs.

### 11.1.11 0.1

2022-07-21

- Initial beta release.

CHAPTER

TWELVE

# INDICES AND TABLES

- genindex
- modindex
- search