
ytools3

Release 3.0.1

Library for validating yaml files against schema and selectively dumping nodes from yaml (or json) documents in yaml or json format.

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Contents

1	Features	3
2	Installation	5
2.1	from PyPI	5
2.2	from GitHub	5
2.3	API Reference	5
2.4	Overview	6
2.5	Coding style	6
2.6	Automated tests	6
2.7	Type Annotations	6
2.8	Build documentation locally	6
2.9	License	7
2.10	Downloading source code	11
	Python Module Index	13
	Index	15

This is a port of the Python 2-only `ytools` (<https://github.com/yaccob/ytools>) to Python 3.

Features

- Output `yaml` as `json` or `python`
- Output `json` as `yaml` or `python` (provided that there are no duplicate mapping entry in the `json` source)
- Extract particular nodes from `yaml` and `json` files.
 - If `yaml` is used as output format (default) the output is a valid `yaml` document.
- Validate `yaml` and `json` documents.
 - The `json-schema` can be provided in `yaml` format as well, which improves readability and writability.
- Preserve order of mapping-keys in `yaml` and `json` output.
- Multi-document support
 - Multiple input files
 - * ... as well as multiple `yaml` documents within a file
 - * ... and a combination of both

Installation

2.1 from PyPI

```
$ python3 -m pip install ytools3 --user
```

2.2 from GitHub

```
$ python3 -m pip install git+https://github.com/domdfcoding/ytools3@master --user
```

2.3 API Reference

Library for validating `yaml` files against schema and selectively dumping nodes from `yaml` (or `json`) documents in `yaml` or `json` format.

Functions:

<code>dump(datafile[, path, format, yaml_options, ...])</code>	Load the contents of the given <code>YAML</code> file and output in the desired format.
<code>validate(schemafile, datafiles[, encoding])</code>	Validate the given datafiles using a schema.

dump (*datafile*, *path*='\$', *format*='yaml', *yaml_options*='{explicit_start: True, explicit_end: True, allow_unicode: True}', *json_options*='{indent: 2, encoding: utf-8}', *encoding*='utf-8')

Load the contents of the given `YAML` file and output in the desired format.

Parameters

- **datafile** (`Union[str, Path]`)
- **path** (`str`) – Default '\$'.
- **format** (`str`) – Default 'yaml'.
- **yaml_options** (`str`) – Default '{explicit_start: True, explicit_end: True, allow_unicode: True}'.
- **json_options** (`str`) – Default '{indent: 2, encoding: utf-8}'.
- **encoding** (`str`) – Encoding to open the files with. Default 'utf-8'.

validate (*schemafile*, *datafiles*, *encoding*='utf-8')

Validate the given datafiles using a schema.

Parameters

- **schemafile** (`Union[str, Path]`) – The json or yaml formatted schema to validate with
- **datafiles** (`Iterable[Union[str, Path]]`) – An iterable of json or yaml files to validate
- **encoding** (`str`) – Encoding to open the files with. Default `'utf-8'`.

2.4 Overview

ytools3 uses `tox` to automate testing and packaging, and `pre-commit` to maintain code quality.

Install `pre-commit` with `pip` and install the git hook:

```
$ python -m pip install pre-commit
$ pre-commit install
```

2.5 Coding style

`formate` is used for code formatting.

It can be run manually via `pre-commit`:

```
$ pre-commit run formate -a
```

Or, to run the complete autoformatting suite:

```
$ pre-commit run -a
```

2.6 Automated tests

Tests are run with `tox` and `pytest`. To run tests for a specific Python version, such as Python 3.6:

```
$ tox -e py36
```

To run tests for all Python versions, simply run:

```
$ tox
```

2.7 Type Annotations

Type annotations are checked using `mypy`. Run `mypy` using `tox`:

```
$ tox -e mypy
```

2.8 Build documentation locally

The documentation is powered by `Sphinx`. A local copy of the documentation can be built with `tox`:

```
$ tox -e docs
```

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```

2.10 Downloading source code

The ytools3 source code is available on GitHub, and can be accessed from the following URL: <https://github.com/domdfcoding/ytools3>

If you have git installed, you can clone the repository with the following command:

```
$ git clone https://github.com/domdfcoding/ytools3
```

```
Cloning into 'ytools3'...  
remote: Enumerating objects: 47, done.  
remote: Counting objects: 100% (47/47), done.  
remote: Compressing objects: 100% (41/41), done.  
remote: Total 173 (delta 16), reused 17 (delta 6), pack-reused 126  
Receiving objects: 100% (173/173), 126.56 KiB | 678.00 KiB/s, done.  
Resolving deltas: 100% (66/66), done.
```

Alternatively, the code can be downloaded in a 'zip' file by clicking:

Clone or download -> Download Zip

2.10.1 Building from source

The recommended way to build ytools3 is to use tox:

```
$ tox -e build
```

The source and wheel distributions will be in the directory dist.

If you wish, you may also use [pep517.build](#) or another **PEP 517**-compatible build tool.

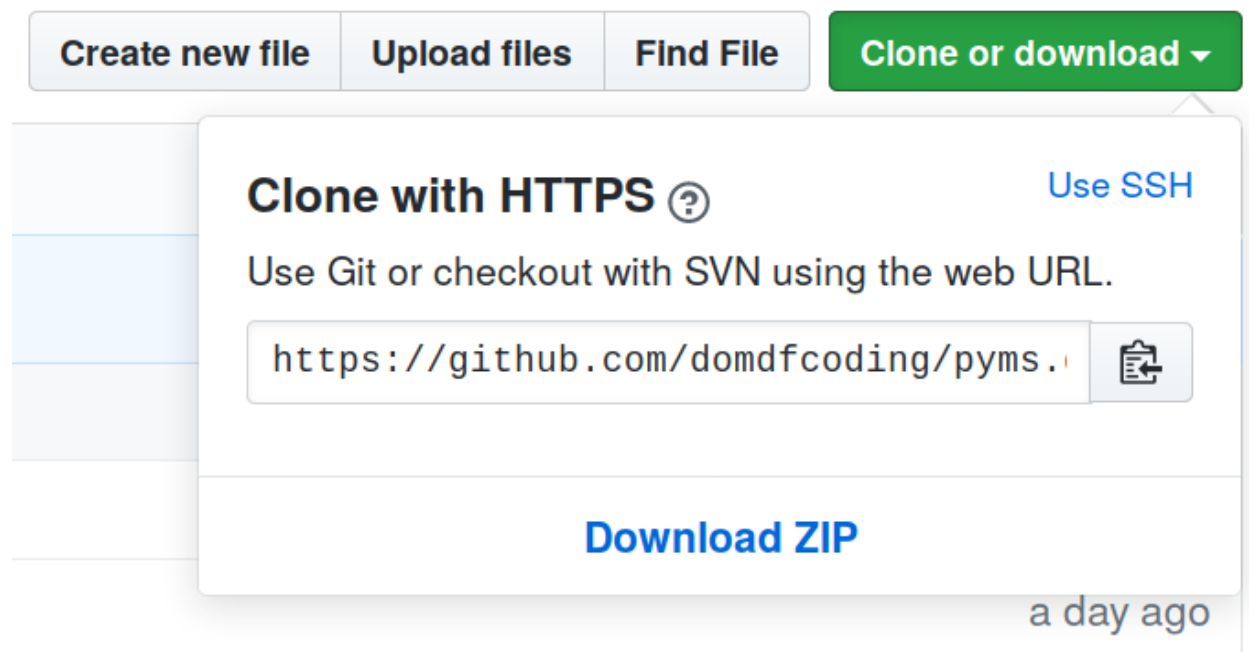


Fig. 1: Downloading a 'zip' file of the source code

Python Module Index

y

ytools, 5

A

Apache License 2.0, 7

D

`dump()` (*in module ytools*), 5

M

module
 ytools, 5

P

Python Enhancement Proposals
 PEP 517, 11

V

`validate()` (*in module ytools*), 5

Y

ytools
 module, 5