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# kaptan Documentation

*Release 0.6.0*

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configuration parser.



# CHAPTER 1

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## installation

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```
$ pip install kaptan
```

Also available as a package on FreeBSD, Debian, Arch Linux and Slackware.



# CHAPTER 2

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## usage

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### supported handlers

- dict
- json
- yaml
- .ini
- python file

### default (dict) handler

```
config = kaptan.Kaptan()
config.import_config({
    'environment': 'DEV',
    'redis_uri': 'redis://localhost:6379/0',
    'debug': False,
    'pagination': {
        'per_page': 10,
        'limit': 20,
    }
})

print config.get("pagination.limit")

# output: 20
```

### json handler

```
config = kaptan.Kaptan(handler="json")
config.import_config('{"everything": 42}')

print config.get("everything")
# output: 42
```

### yaml handler

```
config = kaptan.Kaptan(handler="yaml")
config.import_config("""
product:
    price:
        value: 12.65
        currency_list:
            1. TL
            2. EURO
"""
)
print config.get("product.price.currency_list.0")
# output: TL
```

or you can get from directly from the filename:

```
config.import_config("configuration.yaml")
```

### .ini handler

config.ini

```
[development]
database_uri = mysql://root:123456@localhost/posts

[production]
database_uri = mysql://poor_user:poor_password@localhost/poor_posts
```

```
config = kaptan.Kaptan(handler="ini")
config.import_config('config.ini')

print config.get("production.database_uri")
# output: mysql://poor_user:poor_password@localhost/poor_posts
```

### file handler

config.py

```
DATABASE = 'mysql://root:123456@localhost/posts'
DEBUG = False
PAGINATION = {
    'per_page': 10,
    'limit': 20,
}
```

```
config = kaptan.Kaptan(handler="file")
config.import_config('config')

print config.get("DEBUG")
# output: False
```

# CHAPTER 3

## exporting configuration

```
config = kaptan.Kaptan(handler="file")
config.import_config({
    'environment': 'DEV',
    'redis_uri': 'redis://localhost:6379/0',
    'debug': False,
    'pagination': {
        'per_page': 10,
        'limit': 20,
    }
})

print config.export("yaml")
```

### output:

```
debug: false
environment: DEV
pagination: {limit: 20, per_page: 10}
redis_uri: redis://localhost:6379/0
```

```
print config.export("json")
```

outputs unindented json. .export accepts kwargs which pass into *json.dumps*.

```
print config.export("json", indent=4)
```

### output:

```
{
    "environment": "DEV",
    "debug": false,
    "pagination": {
        "per_page": 10,
        "limit": 20
```

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```
},
"redis_uri": "redis://localhost:6379/0"
}
```

`config.export('yaml')` also supports the `kwargs` for `pyyaml`.

New in Version 0.5.7: `config.export('yaml', safe=True)` will use `.safe_dump`.

# CHAPTER 4

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## cli

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exporting (defaults to json)

```
$ echo "environment: DEV" > config.yaml
$ kaptan config.yaml --export json > config.json
$ cat config.json
{"environment": "DEV"}
```

getting a value

```
$ kaptan config.yaml --key environment
DEV
```

specifying the handler

```
$ mv config.yaml config.settings
$ kaptan config.settings:yaml --export json
{"environment": "DEV"}
```

config from stdin

```
$ echo '{"source": "stdin"}' | kaptan -
{"source": "stdin"}
$ echo 'source: stdin' | kaptan -:yaml
{"source": "stdin"}
```

merging configs

```
$ echo "environment: PROD" > config.settings
$ echo '{"source": "stdin"}' | kaptan - config.json config.settings:yaml
{"environment": "PROD", "source": "stdin"}
```

setting default handler

```
$ echo "source: stdin" | kaptan --handler yaml - config.settings
{"environment": "PROD", "source": "stdin"}
```

writing json with yaml

```
$ kaptan --yaml -e json
<type yaml here>
<Ctrl + D>
<get json here>
```

# CHAPTER 5

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## running tests

---

```
with py.test:
```

```
$ py.test
```



# CHAPTER 6

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## contributors

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- Cenk Altı
- Wesley Bitter
- Mark Steve
- Tony Narlock
- Berker Peksag
- Pradyun S. Gedam

see more at <https://github.com/emre/kaptan/graphs/contributors>.

Explore:

## 6.1 API Reference

### 6.1.1 kaptan

configuration parser.

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```
class kaptan.Kaptan(handler=None)
Bases: object

HANDLER_MAP = {'dict': <class 'kaptan.handlers.dict_handler.DictHandler'>, 'file': <
upsert(key, value)

_is_python_file(value)
Return True if the value is the path to an existing file with a .py extension. False otherwise
```

```
import_config(value)
_get(key)
get(key=None, default=<object object>)
export(handler=None, **kwargs)
_Kaptan__handle_default_value(key, default)

kaptan.get_parser()
Create and return argument parser.

Return type argparse.ArgumentParser

Returns CLI Parser

kaptan.main()

class kaptan.Kaptan(handler=None)
Bases: object

_is_python_file(value)
Return True if the value is the path to an existing file with a .py extension. False otherwise
```

## 6.1.2 Handlers

```
class kaptan.handlers.BaseHandler
Bases: object

Base class for data handlers.

dump(data)
load(data)

class kaptan.handlers.dict_handler.DictHandler
Bases: kaptan.handlers.BaseHandler

dump(data)
load(data)

class kaptan.handlers.ini_handler.IniHandler
Bases: kaptan.handlers.BaseHandler

dump(data, file_=None)
load(value)

class kaptan.handlers.json_handler.JsonHandler
Bases: kaptan.handlers.BaseHandler

dump(data, **kwargs)
load(data)

class kaptan.handlers.yaml_handler.YamlHandler
Bases: kaptan.handlers.BaseHandler

dump(data, safe=True, **kwargs)
load(data, safe=True)
```

## 6.2 Command Line Interface

Configuration manager in your pocket

```
usage: kaptan [-h] [--handler HANDLER] [-e EXPORT] [-k KEY]
               [config_file [config_file ...]]
```

### 6.2.1 Positional Arguments

|                    |                            |
|--------------------|----------------------------|
| <b>config_file</b> | file/s to load config from |
|--------------------|----------------------------|

### 6.2.2 Named Arguments

|                     |  |
|---------------------|--|
| <b>--handler</b>    | set default handler<br>Default: “json”     |
| <b>-e, --export</b> | set format to export to<br>Default: “json” |
| <b>-k, --key</b>    | set config key to get value of             |

## 6.3 History

Here you can find the recent changes to kaptan

### 6.3.1 v0.6.0 (2023-08-27)

#### Features

- .ini export (#160) thank you @onurguzel

#### CI

- Add GitHub action CI workflow with *pipenv* and python-version test grid (#251)
- Remove .travis.yml (#251)

#### Packaging updates

- Remove upper bound on pyyaml version (#252)  
Development commits also bump pyyaml version to from <6 to <7 (#250), thank you @pauloacmartinez
- Remove version pinning from dev packages (#250), thank you @pauloacmartinez
- Update classifiers to currently supported Python versions (#250), thank you @pauloacmartinez
- Fix classifiers warning (#226) by @sunpoet
- Relax pytest version constraint (#163), thank you @ignatenkobrain

## Meta

- Fix license language to official BSD license (#234)

### 6.3.2 v0.5.12 (2019-04-22)

- Bump pipenv version to python 3.x
- Utility package updates
- Bump pyyaml version to <6

### 6.3.3 v0.5.11 (2018-12-30)

- Update dependencies for pytest, sphinx, etc.
- Forward compatibility with Python 3.8 collections.abc
- sphinx-argparse 0.2.2 to 0.2.5
- Sphinx 1.7.5 to 1.8.3
- sphinx-rtd-theme 0.4.0 to 0.4.2
- flake8 3.5.0 to 3.6.0
- pytest 3.6.2 to 4.0.2

### 6.3.4 v0.5.10 (2018-07-06)

- Update Pipfile
- Relax pyyaml requirements to <4
- Support for Python 3.7
- Prevent test from creating stray .pyc files
- Update pytest 3.2.3 to 3.6.3
- Update sphinx 1.6.4 to 1.7.5
- Update sphinx-argparse 0.2.1 to 0.2.2
- Update sphinx-rtd-theme 0.2.4 to 0.4.0
- Add `make sync_pipfile` for updating Pipfile

### 6.3.5 v0.5.9 (2017-10-19)

- Make yaml safe by default (<https://github.com/emre/kaptan/pull/46>) by @pradyunsg
- Add `Pipfile` for `pipenv`
- Add `.tmuxp.yaml` for `tmuxp`
- Add `Makefile` with tasks to re-run commands on file save, rebuild sphinx
- Update py.test, sphinx versions

## 6.4 Roadmap

See <https://github.com/emre/kaptan/issues>.



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## Python Module Index

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