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# **DoJSON Documentation**

***Release 0.4.0***

**Invenio collaboration**

November 18, 2015



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DoJSON is a simple Pythonic JSON to JSON converter.



### Installation

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DoJSON is on PyPI so all you need is:

```
$ pip install dojson
```



### Example

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A simple example on how to convert MARCXML to JSON:

```
from dojson.contrib.marc21.utils import create_record, split_stream
from dojson.contrib.marc21 import marc21
[marc21.do(create_record(data)) for data in split_stream(open('/tmp/data.xml', 'r'))]
```



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**API**

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DoJSON API.

```
class dojson.Overdo(bases=None, entry_point_group=None)
    Translation index.

    build()
        Build.

    do(blob)
        Translate blob values and instantiate new model instance.

    missing(blob)
        Return keys with missing rules.

    over(name, *source_tags)
        Register creator rule.
```

## 3.1 Command line interface

DoJSON command line interface.

This script is installed using the magic `console_script` section in `entry_points` parameters thanks to `setuptools`. In order to get help from console one can run:

```
$ dojson --help
```

### Extensions

New extensions with loaders, dumper, or rules can be provided via entry points.

- `dojson.cli.load` functions expecting a stream and returning Python dict or iterator;
- `dojson.cli.dump` functions expecting a Python object and returning `str`;
- `dojson.cli.rule` instances of `dojson.Overdo` with loaded rules.

```
dojson.cli.open_entry_point(group_name)
    Open entry point.
```

## 3.2 Contrib



## Changes

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### 4.1 Version 0.4.0 (released 2015-11-18):

#### 4.1.1 New features

- Improves `dojson.contrib.marc2.utils.load()` to read the input by iterating of the open stream, rather than loading it all in memory in one go. (#45) (#46)
- Renames `OverUndo` to `Underdo` following same name convention as for `Overdo`.

#### 4.1.2 Bug fixes

- Fixes indicator extraction from value in `Underdo` model.

### 4.2 Version 0.3.0 (released 2015-11-09):

#### 4.2.1 New features

- Adds **experimental** rules for converting human readable JSON into a JSON representation of the MARC21 Format.
- Adds `do` and `missing` commands for `dojson` command line interface (see `dojson -help` for more information).

#### 4.2.2 Improved features

- Adds missing mapping for the first indicator of field 856.

### 4.3 Version 0.2.0 (released 2015-10-07):

#### 4.3.1 New features

- Adds the possibility to use base DoJSON model so the rules are “inherited” from them.
- Adds new decorator `ignore_value` that remove the key in the resulting json for None value.

### 4.3.2 Improved features

- Uses entry points instead of plain imports to load the creator rules.

### 4.3.3 Bug fixes

- Removes calls to PluginManager consider\_setuptools\_entrypoints() removed in PyTest 2.8.0.

## 4.4 Version 0.1.1 (released 2015-07-27):

- Sorts and removes duplicated enum values.
- Swaps wrongly defined repeatable and non-repeatable subfields. (#23)
- Addresses issue when allowed indicators where defined as a range. (#22)

## 4.5 Version 0.1.0 (released 2015-07-03):

- Initial public release.

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## Contributing

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Bug reports, feature requests, and other contributions are welcome. If you find a demonstrable problem that is caused by the code of this library, please:

1. Search for [already reported problems](#).
2. Check if the issue has been fixed or is still reproducible on the latest *master* branch.
3. Create an issue with [a test case](#).

If you create a feature branch, you can run the tests to ensure everything is operating correctly:

```
$ python setup.py test  
...  
===== 31 passed, 23 skipped in 1.37 seconds =====
```

You can also test your feature branch using Docker:

```
$ docker-compose build  
$ docker-compose run web python setup.py test  
$ docker-compose run web python setup.py build_sphinx  
$ docker-compose run web pep257 --match-dir='dojson'
```



### Authors

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