
DataCite Documentation

Release 0.2.0

Invenio Software

March 23, 2016

1	Installation	3
2	Usage	5
3	Metadata Store API	7
3.1	Errors	7
4	DataCite v3.1 XML generation	9
5	Changes	11
6	Contributing	13
7	License	15
7.1	Authors	15

Python API wrapper for the DataCite Metadata Store API and DataCite XML generation.

Installation

The datacite package is on PyPI so all you need is:

```
$ pip install datacite
```

Usage

Below is full usage example of the DataCite MDS client API wrapper. Please see the [DataCite MDS API documentation](#) for further information on the API.

```
1 from datacite import DataCiteMDSClient, schema31
2
3 data = {
4     'identifier': {
5         'identifier': '10.5072/test-doi',
6         'identifierType': 'DOI',
7     },
8     'creators': [
9         {'creatorName': 'Smith, John'}
10    ],
11    'titles': [
12        {'title': 'DataCite PyPI Package'}
13    ],
14    'publisher': 'CERN',
15    'publicationYear': '2015',
16 }
17
18 # Validate dictionary
19 assert schema31.validate(data)
20
21 # Generate DataCite XML from dictionary.
22 doc = schema31.tostring(data)
23
24 # Initialize the MDS client.
25 d = DataCiteMDSClient(
26     username='MYDC.MYACCOUNT',
27     password='mypassword',
28     prefix='10.5072',
29     test_mode=True
30 )
31
32 # Set metadata for DOI
33 d.metadata_post(doc)
34
35 # Mint new DOI
36 d.doi_post('10.5072/test-doi', 'http://example.org/test-doi')
37
38 # Get DOI location
39 location = d.doi_get("10.5072/test-doi")
40
```

```
41 # Set alternate URL for content type (available through content negotiation)
42 d.media_post(
43     "10.5072/test-doi",
44     {"application/json": "http://example.org/test-doi/json/",
45      "application/xml": "http://example.org/test-doi/xml/" }
46 )
47
48 # Get alternate URLs
49 mapping = d.media_get("10.5072/test-doi")
50 assert mapping["application/json"] == "http://example.org/test-doi/json/"
51
52 # Get metadata for DOI
53 doc = d.metadata_get("10.5072/test-doi")
54
55 # Make DOI inactive
56 d.metadata_delete("10.5072/test-doi")
```

Metadata Store API

3.1 Errors

DataCite v3.1 XML generation

Changes

Version v0.2.0 (released 2016-03-21):

- Adds DataCite XML generation support.

Version 0.1 (released 2015-02-25):

- Initial public release.

Contributing

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
```

License

DataCite is free software; you can redistribute it and/or modify it under the terms of the Revised BSD License quoted below.

Copyright (C) 2015-2016 CERN.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- Neither the name of the copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

In applying this license, CERN does not waive the privileges and immunities granted to it by virtue of its status as an Intergovernmental Organization or submit itself to any jurisdiction.

7.1 Authors

DataCite is developed for use in [Invenio](#) digital library software.

Contact us at info@invenio-software.org

7.1.1 Contributors

- Lars Holm Nielsen <lars.holm.nielsen@cern.ch>
- Laura Rueda Garcia <laura.rueda@cern.ch>
- Jiri Kuncar <jiri.kuncar@cern.ch>
- Sami Hiltunen <sami.mikael.hiltunen@cern.ch>
- Tibor Simko <tibor.simko@cern.ch>