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# **DataCite Documentation**

***Release 0.2.2***

**Invenio Software**

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



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# Installation

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

```
$ pip install datacite
```





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## Usage

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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")
```

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## Metadata Store API

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### 3.1 Errors



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## DataCite v3.1 XML generation

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### Changes

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Version v0.2.2 (released 2016-09-23):

- Fixes issue with generated order of nameIdentifier and affiliation tags.

Version v0.2.1 (released 2016-03-29):

- Fixes issue with JSON schemas not being included when installing from PyPI.

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

- Adds DataCite XML generation support.

Version 0.1 (released 2015-02-25):

- 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
```



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## License

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