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# **idutils Documentation**

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**Invenio Software**

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<b>1</b>	<b>Installation</b>	<b>3</b>
<b>2</b>	<b>API</b>	<b>5</b>
<b>3</b>	<b>Changes</b>	<b>9</b>
<b>4</b>	<b>Contributing</b>	<b>11</b>
<b>5</b>	<b>License</b>	<b>13</b>
<b>6</b>	<b>Authors</b>	<b>15</b>
	<b>Python Module Index</b>	<b>17</b>



Small library for validating and normalising persistent identifiers used in scholarly communication.

- Free software: Revised BSD license
- Documentation: <https://idutils.readthedocs.org>.
- Validation and normalization of persistent identifiers.
- Detection of persistent identifier scheme.
- Generation of resolving links for persistent identifiers.
- Supported schemes: ISBN10, ISBN13, ISSN, ISTC, DOI, Handle, EAN8, EAN13, ISNI ORCID, ARK, PURL, LSID, URN, Bibcode, arXiv, PubMed ID, PubMed Central ID, GND.



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# Installation

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

```
$ pip install idutils
```





Small library for persistent identifiers used in scholarly communication.

`idutils.is_isbn10(val)`

Test if argument is an ISBN-10 number.

Courtesy Wikipedia: [http://en.wikipedia.org/wiki/International\\_Standard\\_Book\\_Number](http://en.wikipedia.org/wiki/International_Standard_Book_Number)

`idutils.is_isbn13(val)`

Test if argument is an ISBN-13 number.

Courtesy Wikipedia: [http://en.wikipedia.org/wiki/International\\_Standard\\_Book\\_Number](http://en.wikipedia.org/wiki/International_Standard_Book_Number)

`idutils.is_isbn(val)`

Test if argument is an ISBN-10 or ISBN-13 number.

`idutils.is_issn(val)`

Test if argument is an ISSN number.

`idutils.is_istc(val)`

Test if argument is a International Standard Text Code.

See [http://www.istc-international.org/html/about\\_structure\\_syntax.aspx](http://www.istc-international.org/html/about_structure_syntax.aspx)

`idutils.is_doi(val)`

Test if argument is a DOI.

`idutils.is_handle(val)`

Test if argument is a Handle.

Note, DOIs are also handles, and handle are very generic so they will also match e.g. any URL your parse.

`idutils.is_ean8(val)`

Test if argument is a International Article Number (EAN-8).

`idutils.is_ean13(val)`

Test if argument is a International Article Number (EAN-13).

`idutils.is_ean(val)`

Test if argument is a International Article Number (EAN-13 or EAN-8).

See [http://en.wikipedia.org/wiki/International\\_Article\\_Number\\_\(EAN\)](http://en.wikipedia.org/wiki/International_Article_Number_(EAN)).

`idutils.is_isni(val)`

Test if argument is an International Standard Name Identifier.

`idutils.is_orcid(val)`

Test if argument is an ORCID ID.

See <http://support.orcid.org/knowledgebase/articles/116780-structure-of-the-orcid-identifier>

`idutils.is_purl(val)`

Test if argument is a PURL.

`idutils.is_url(val)`

Test if argument is a URL.

`idutils.is_lsid(val)`

Test if argument is a LSID.

`idutils.is_urn(val)`

Test if argument is an URN.

`idutils.is_ads(val)`

Test if argument is an ADS bibliographic code.

`idutils.is_arxiv_post_2007(val)`

Test if argument is a post-2007 arXiv ID.

`idutils.is_arxiv_pre_2007(val)`

Test if argument is a pre-2007 arXiv ID.

`idutils.is_arxiv(val)`

Test if argument is an arXiv ID.

See [http://arxiv.org/help/arxiv\\_identifier](http://arxiv.org/help/arxiv_identifier) and [http://arxiv.org/help/arxiv\\_identifier\\_for\\_services](http://arxiv.org/help/arxiv_identifier_for_services).

`idutils.is_pmid(val)`

Test if argument is a PubMed ID.

Warning: PMID are just integers, with no structure, so this function will say any integer is a PubMed ID

`idutils.is_pmcid(val)`

Test if argument is a PubMed Central ID.

`idutils.is_gnd(val)`

Test if argument is a GND Identifier.

`idutils.detect_identifier_schemes(val)`

Detect persistent identifier scheme for a given value.

Note, some schemes like PMID are very generic.

`idutils.normalize_doi(val)`

Normalize a DOI.

`idutils.normalize_handle(val)`

Normalize a Handle identifier.

`idutils.normalize_ads(val)`

Normalize an ADS bibliographic code.

`idutils.normalize_orcid(val)`

Normalize an ORCID identifier.

`idutils.normalize_gnd(val)`

Normalize a GND identifier.

`idutils.normalize_pmid(val)`

Normalize an PubMed ID.

`idutils.normalize_arxiv(val)`

Normalize an arXiv identifier.

`idutils.normalize_pid(val, scheme)`

Normalize an identifier.

E.g. doi:10.1234/foo and http://dx.doi.org/10.1234/foo and 10.1234/foo will all be normalized to 10.1234/foo.

`idutils.to_url(val, scheme)`

Convert a resolvable identifier into a URL for a landing page.



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### Changes

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Version 0.1.0 (2015-07-02)

- First 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:

```
$ ./run-tests.sh
```





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### License

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**i**

idutils, 5



## D

`detect_identifier_schemes()` (in module `idutils`), 6

## I

`idutils` (module), 5

`is_ads()` (in module `idutils`), 6

`is_arxiv()` (in module `idutils`), 6

`is_arxiv_post_2007()` (in module `idutils`), 6

`is_arxiv_pre_2007()` (in module `idutils`), 6

`is_doi()` (in module `idutils`), 5

`is_ean()` (in module `idutils`), 5

`is_ean13()` (in module `idutils`), 5

`is_ean8()` (in module `idutils`), 5

`is_gnd()` (in module `idutils`), 6

`is_handle()` (in module `idutils`), 5

`is_isbn()` (in module `idutils`), 5

`is_isbn10()` (in module `idutils`), 5

`is_isbn13()` (in module `idutils`), 5

`is_isni()` (in module `idutils`), 5

`is_issn()` (in module `idutils`), 5

`is_istc()` (in module `idutils`), 5

`is_lsid()` (in module `idutils`), 6

`is_orcid()` (in module `idutils`), 5

`is_pmcid()` (in module `idutils`), 6

`is_pmid()` (in module `idutils`), 6

`is_purl()` (in module `idutils`), 6

`is_url()` (in module `idutils`), 6

`is_urn()` (in module `idutils`), 6

## N

`normalize_ads()` (in module `idutils`), 6

`normalize_arxiv()` (in module `idutils`), 6

`normalize_doi()` (in module `idutils`), 6

`normalize_gnd()` (in module `idutils`), 6

`normalize_handle()` (in module `idutils`), 6

`normalize_orcid()` (in module `idutils`), 6

`normalize_pid()` (in module `idutils`), 6

`normalize_pmid()` (in module `idutils`), 6

## T

`to_url()` (in module `idutils`), 7