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1.4 idna 2.2

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Found in path(s):

```
* /opt/cola/permits/147238628_1695306711.948283/0/idna-2-2-tar-gz/idna-2.2/LICENSE.rst
```

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A library to support the Internationalised Domain Names in Applications (IDNA) protocol as specified in RFC 5890 et.al. This new methodology, known as IDNA 2008, can generate materially different results to the previous standard. The library can act as a drop-in replacement for the "encodings.idna" module.

```
import io, sys
```

```
from setuptools import setup
```

```
version = "2.2"
```

```
def main():
```

```
    python_version = sys.version_info[:2]
```

```
    if python_version < (2,6):
```

```
        raise SystemExit("Sorry, Python 2.6 or newer required")
```

```
    arguments = {
```

```
        'name': 'idna',
```

```

'packages': ['idna'],
'version': version,
'description': 'Internationalized Domain Names in Applications (IDNA)',
'long_description': io.open("README.rst", encoding="UTF-8").read(),
'author': 'Kim Davies',
'author_email': 'kim@cynosure.com.au',
'license': 'BSD-like',
'url': 'https://github.com/kjd/idna',
'classifiers': [
    'Development Status :: 5 - Production/Stable',
    'Intended Audience :: Developers',
    'Intended Audience :: System Administrators',
    'License :: OSI Approved :: BSD License',
    'Operating System :: OS Independent',
    'Programming Language :: Python',
    'Programming Language :: Python :: 2.6',
    'Programming Language :: Python :: 2.7',
    'Programming Language :: Python :: 3',
    'Programming Language :: Python :: 3.3',
    'Programming Language :: Python :: 3.4',
    'Programming Language :: Python :: 3.5',
    'Topic :: Internet :: Name Service (DNS)',
    'Topic :: Software Development :: Libraries :: Python Modules',
    'Topic :: Utilities',
],
'test_suite': 'tests',
}

```

```
setup(**arguments)
```

```

if __name__ == '__main__':
    main()

```

Found in path(s):

* /opt/cola/permits/147238628_1695306711.948283/0/idna-2-2-tar-gz/idna-2.2/setup.py

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Metadata-Version: 1.1

Name: idna

Version: 2.2

Summary: Internationalized Domain Names in Applications (IDNA)

Home-page: <https://github.com/kjd/idna>

Author: Kim Davies

Author-email: kim@cynosure.com.au

License: BSD-like

Description: Internationalized Domain Names in Applications (IDNA)

=====

Support for the Internationalised Domain Names in Applications (IDNA) protocol as specified in RFC 5891 <<http://tools.ietf.org/html/rfc5891>>`_. This is the latest version of the protocol and is sometimes referred to as “IDNA 2008”.

This library also provides support for Unicode Technical Standard 46, `Unicode IDNA Compatibility Processing <<http://unicode.org/reports/tr46/>>`_.

This acts as a suitable replacement for the “encodings.idna” module that comes with the Python standard library, but only supports the old, deprecated IDNA specification (RFC 3490 <<http://tools.ietf.org/html/rfc3490>>`_).

Basic functions are simply executed:

```
.. code-block:: pycon

# Python 3
>>> import idna
>>> idna.encode('.')
b'xn--eckwd4c7c.xn--zckzah'
>>> print(idna.decode('xn--eckwd4c7c.xn--zckzah'))
.

# Python 2
>>> import idna
>>> idna.encode(u'.')
'xn--eckwd4c7c.xn--zckzah'
>>> print idna.decode('xn--eckwd4c7c.xn--zckzah')
.
```

Packages

The latest tagged release version is published in the PyPI repository:

```
.. image:: https://badge.fury.io/py/idna.svg
:target: http://badge.fury.io/py/idna
```

Installation

To install this library, you can use pip:

```
.. code-block:: bash
```

```
$ pip install idna
```

Alternatively, you can install the package using the bundled setup script:

```
.. code-block:: bash
```

```
$ python setup.py install
```

This library works with Python 2.6 or later, and Python 3.3 or later.

Usage

For typical usage, the `encode` and `decode` functions will take a domain name argument and perform a conversion to A-labels or U-labels respectively.

```
.. code-block:: pycon
```

```
# Python 3
>>> import idna
>>> idna.encode('.')
b'xn--eckwd4c7c.xn--zckzah'
>>> print(idna.decode('xn--eckwd4c7c.xn--zckzah'))
.
```

You may use the codec encoding and decoding methods using the `idna.codec` module:

```
.. code-block:: pycon
```

```
# Python 2
>>> import idna.codec
>>> print u'.'.encode('idna')
xn--80ahd1agd.xn--80akhbyknj4f
>>> print 'xn--80ahd1agd.xn--80akhbyknj4f'.decode('idna')
.
```

Conversions can be applied at a per-label basis using the `ulabel` or `alabel` functions if necessary:

```
.. code-block:: pycon
```

```
# Python 2
>>> idna.alabel(u")
'xn--0zwm56d'
```

Compatibility Mapping (UTS #46)

+++++

As described in `RFC 5895 <<http://tools.ietf.org/html/rfc5895>>`, the IDNA specification no longer normalizes input from different potential ways a user may input a domain name. This functionality, known as a “mapping”, is now considered by the specification to be a local user-interface issue distinct from IDNA conversion functionality.

This library provides one such mapping, that was developed by the Unicode Consortium. Known as `Unicode IDNA Compatibility Processing <<http://unicode.org/reports/tr46/>>`, it provides for both a regular mapping for typical applications, as well as a transitional mapping to help migrate from older IDNA 2003 applications.

For example, “Königsgäßchen” is not a permissible label as *LATIN CAPITAL LETTER K* is not allowed (nor are capital letters in general). UTS 46 will convert this into lower case prior to applying the IDNA conversion.

.. code-block:: pycon

```
# Python 3
>>> import idna
>>> idna.encode(u'Königsgäßchen')
...
idna.core.InvalidCodepoint: Codepoint U+004B at position 1 of 'Königsgäßchen' not allowed
>>> idna.encode('Königsgäßchen', uts46=True)
b'xn--knigsgchen-b4a3dun'
>>> print(idna.decode('xn--knigsgchen-b4a3dun'))
königsgäßchen
```

Transitional processing provides conversions to help transition from the older 2003 standard to the current standard. For example, in the original IDNA specification, the *LATIN SMALL LETTER SHARP S* (ß) was converted into two *LATIN SMALL LETTER S* (ss), whereas in the current IDNA specification this conversion is not performed.

.. code-block:: pycon

```
# Python 2
>>> idna.encode(u'Königsgäßchen', uts46=True, transitional=True)
'xn--knigsgsschen-lcb0w'
```

Implementors should use transitional processing with caution, only in rare cases where conversion from legacy labels to current labels must be performed (i.e. IDNA implementations that pre-date 2008). For typical applications that just need to convert labels, transitional processing is unlikely to be beneficial and could produce unexpected incompatible results.

`encodings.idna` Compatibility

+++++

Function calls from the Python built-in `encodings.idna` module are mapped to their IDNA 2008 equivalents using the `idna.compat` module. Simply substitute the `import` clause in your code to refer to the new module name.

Exceptions

All errors raised during the conversion following the specification should raise an exception derived from the `idna.IDNAError` base class.

More specific exceptions that may be generated as `idna.IDNABidiError` when the error reflects an illegal combination of left-to-right and right-to-left characters in a label; `idna.InvalidCodepoint` when a specific codepoint is an illegal character in an IDN label (i.e. INVALID); and `idna.InvalidCodepointContext` when the codepoint is illegal based on its positional context (i.e. it is CONTEXTO or CONTEXTJ but the contextual requirements are not satisfied.)

Testing

The library has a test suite based on each rule of the IDNA specification, as well as tests that are provided as part of the Unicode Technical Standard 46, 'Unicode IDNA Compatibility Processing <<http://unicode.org/reports/tr46/>>'.
_.

The tests are run automatically on each commit at Travis CI:

```
.. image:: https://travis-ci.org/kjd/idna.svg?branch=master
   :target: https://travis-ci.org/kjd/idna
```

Platform: UNKNOWN

Classifier: Development Status :: 5 - Production/Stable

Classifier: Intended Audience :: Developers

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Classifier: License :: OSI Approved :: BSD License

Classifier: Operating System :: OS Independent

Classifier: Programming Language :: Python

Classifier: Programming

Language :: Python :: 2.6

Classifier: Programming Language :: Python :: 2.7

Classifier: Programming Language :: Python :: 3

Classifier: Programming Language :: Python :: 3.3

Classifier: Programming Language :: Python :: 3.4

Classifier: Programming Language :: Python :: 3.5

Classifier: Topic :: Internet :: Name Service (DNS)
Classifier: Topic :: Software Development :: Libraries :: Python Modules
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* /opt/cola/permits/147238628_1695306711.948283/0/idna-2-2-tar-gz/idna-2.2/idna.egg-info/PKG-INFO
* /opt/cola/permits/147238628_1695306711.948283/0/idna-2-2-tar-gz/idna-2.2/PKG-INFO

1.5 ip-address 1.0.18

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1.6 ncclient 0.4.2

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1.7 ncclient 0.5.3

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1.8 paramiko 2.1.1

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1.9 Ixml 3.7.2

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1.10 pyasn1 0.2.2

1.10.1 Available under license :

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ASN.1 library for Python

[![Python Versions](https://img.shields.io/pypi/pyversions/pyasn1.svg)](https://pypi.python.org/pypi/pyasn1/)
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[![GitHub license](https://img.shields.io/badge/license-BSD-blue.svg)](https://raw.githubusercontent.com/etingof/pyasn1/master/LICENSE.txt)

This is a free and open source implementation of ASN.1 types and codecs as a Python package. It has been first written to support particular protocol (SNMP) but then generalized to be suitable for a wide range

of protocols based on

[ASN.1 specification](https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-X.208-198811-W!!PDF-E&type=items).

Features

- * Generic implementation of ASN.1 types (X.208)
- * Standards compliant BER/CER/DER codecs
- * 100% Python, works with Python 2.4 up to Python 3.6
- * MT-safe
- * Contributed ASN.1 compiler [Asn1ate](<https://github.com/kimgr/asn1ate>)

Why using pyasn1

ASN.1 solves the data serialization problem. This solution was designed long ago by the wise Ancients. Back then, they did not have the luxury of wasting bits. That is why ASN.1 is designed to serialize data structures of unbounded complexity into something compact and efficient when it comes to processing the data.

That probably explains why many network protocols and file formats still rely on the 30+ years old technology. Including a number of high-profile Internet protocols and file formats.

Quite a number of books cover the topic of ASN.1. [Communication between heterogeneous systems](<http://www.oss.com/asn1/dubuisson.html>) by Olivier Dubuisson is one of those high quality books freely available on the Internet.

The pyasn1 package is designed to help Python programmers tackling network protocols and file formats at the comfort of their Python prompt. The tool struggles to capture all aspects of a rather complicated ASN.1 system and to represent it on the Python terms.

How to use pyasn1

With pyasn1 you can build Python objects from ASN.1 data structures. For example, the following ASN.1 data structure:

```
```bash
Record ::= SEQUENCE {
 id INTEGER,
```

```

room [0] INTEGER OPTIONAL,
house [1] INTEGER DEFAULT 0
}
...

```

Could be expressed in pyasn1 like this:

```

```python
class Record(Sequence):
    componentType = NamedTypes(
        NamedType('id', Integer()),
        OptionalNamedType(
            'room', Integer().subtype(
                implicitTag=Tag(tagClassContext, tagFormatSimple, 0)
            )
        ),
        DefaultedNamedType(
            'house', Integer(0).subtype(
                implicitTag=Tag(tagClassContext, tagFormatSimple, 1)
            )
        )
    )
)
)
...

```

It is in the spirit of ASN.1 to take abstract data description and turn it into a programming language specific form. Once you have your ASN.1 data structure expressed in Python, you can use it along the lines of similar Python type (e.g. ASN.1 `SET` is similar to Python `dict`, `SET OF` to `list`):

```

```python
>>> record = Record()
>>> record['id'] = 123
>>> record['room'] = 321
>>> print(record.prettyPrint())
Record:
id=123
room=321
>>>
...

```

Part of the power of ASN.1 comes from its serialization features. You can serialize your data structure and send it over the network.

```

```python
>>> from pyasn1.codec.der.encoder import encode
>>> substrate = encode(record)

```

```
>>> hexdump(substrate)
00000: 30 07 02 01 7B 80 02 01 41
...
```

Conversely, you can turn serialized ASN.1 content, as received from network or read from a file, into a Python object which you can introspect, modify, encode and send back.

```
```python
>>> from pyasn1.codec.der.decoder import decode
>>> received_record, rest_of_substrate = decode(substrate,
asn1Spec=Record())
>>>
>>> for field in received_record:
>>> print('{} is {}'.format(field, received_record[field]))
id is 123
room is 321
house is 0
>>>
>>> record == received_record
True
>>> received_record.update(room=123)
>>> substrate = encode(received_record)
>>> hexdump(substrate)
00000: 30 06 02 01 7B 80 01 7B
...
```
```

The pyasn1 classes struggle to emulate their Python prototypes (e.g. int, list, dict etc.). But ASN.1 types exhibit more complicated behaviour. To make life easier for a Pythonista, they can turn their pyasn1 classes into Python built-ins:

```
```python
>>> from pyasn1.codec.native.encoder import encode
>>> encode(record)
{'id': 123, 'room': 321, 'house': 0}
...
```
```

Or vice-versa -- you can initialize an ASN.1 structure from a tree of Python objects:

```
```python
>>> from pyasn1.codec.native.decoder import decode
>>> record = decode({'id': 123, 'room': 321, 'house': 0}, asn1Spec=Record())
>>> print(record.prettyPrint())
Record:
id=123
room=321
```
```

>>>
^^^

With

ASN.1 design, serialization codecs are decoupled from data objects, so you could turn every single ASN.1 object into many different serialized forms. As of this moment, pyasn1 supports BER, DER, CER and Python built-ins codecs. The extremely compact PER encoding is expected to be introduced in the upcoming pyasn1 release.

More information on pyasn1 APIs can be found in the [documentation](http://pyasn1.sourceforge.net), compiled ASN.1 modules for different protocols and file formats could be found in the pyasn1-modules [repo](https://github.com/etingof/pyasn1-modules).

How to get pyasn1

The pyasn1 package is distributed under terms and conditions of 2-clause BSD [license](http://pyasn1.sourceforge.net/license.html). Source code is freely available as a GitHub [repo](https://github.com/etingof/pyasn1).

You could `pip install pyasn1` or download it from [PyPI](https://pypi.python.org/pypi/pyasn1).

If something does not work as expected, [open an issue](https://github.com/etingof/pyasn1/issues) at GitHub or post your question [on Stack Overflow](http://stackoverflow.com/questions/ask) or try browsing pyasn1 [mailing list archives](https://sourceforge.net/p/pyasn1/mailman/pyasn1-users/).

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```

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* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-
0.2.2/pyasn1/type/univ.py
*

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```
/opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/test/codec/suite.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/test/type/test_namedtype.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/test/type/test_namedval.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/test/type/test_constraint.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/test/codec/ber/test_encoder.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/pyasn1/error.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/pyasn1/codec/ber/eoo.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/test/codec/der/test_decoder.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/setup.py
*
/opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/test/type/test_tag.py
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/pyasn1/codec/ber/decoder.py
No license file was found, but licenses were detected in source scan.
```

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Found in path(s):

```
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/pyasn1.egg-info/PKG-INFO
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/PKG-INFO
No license file was found, but licenses were detected in source scan.
```

.. _license:

License

=====

.. include:: ../../LICENSE.rst

Found in path(s):

```
* /opt/ws_local/PERMITS_SQL/1063192034_1592962487.48/0/pyasn1-0-2-2-1-tar-gz/pyasn1-0.2.2/doc/source/license.rst
```

1.11 six 1.10.0-3

1.11.1 Available under license :

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