
eth-rlp Documentation

Release 0.3.0

The Ethereum Foundation

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CONTENTS

1	Contents	3
1.1	eth_rlp package	3
1.1.1	HashableRLP	3
1.2	Release Notes	4
1.2.1	eth-rlp v0.3.0 (2022-01-19)	4
1.2.2	Eth_Rlp 0.3.0 (2022-01-19)	4
1.2.3	eth-rlp v0.2.0 (2020-09-01)	5
1.2.4	v0.1.2	5
1.2.5	v0.1.1	5
1.2.6	v0.1.0	5
1.2.7	v0.1.0-alpha.2	5
1.2.8	v0.1.0-alpha.1	6
2	Indices and tables	7
	Python Module Index	9
	Index	11

RLP definitions for common Ethereum objects in Python

Install with

```
pip install eth_rlp
```

Import with

```
from eth_rlp import HashableRLP
```

CHAPTER
ONE

CONTENTS

1.1 eth_rlp package

1.1.1 HashableRLP

```
class eth_rlp.main.HashableRLP(*args, **kwargs)
```

An extension of `rlp.Serializable`. In addition to the below functions, the class is iterable.

Use like:

```
class MyRLP(HashableRLP):
    fields = (
        ('name1', rlp.sedes.big_endian_int),
        ('name2', rlp.sedes.binary),
        etc...
    )

my_obj = MyRLP(name2=b'\xff', name1=1)
list(my_obj) == [1, b'\xff']
# note that the iteration order is always in RLP-defined order
```

`as_dict()` → `Dict[str, Any]`

Convert rlp object to a dict

Returns

mapping of RLP field names to field values

Return type

`dict`

`classmethod from_bytes(serialized_bytes: bytes | bytearray) → Self`

Shorthand invocation for `rlp.decode()` using this class.

Parameters

`serialized_bytes (bytes)` – the byte string to decode

Returns

the decoded object

Return type

`HashableRLP`

`classmethod from_dict(field_dict: Dict[str, Any]) → Self`

In addition to the standard initialization of.

```
my_obj = MyRLP(name1=1, name2=b'\xff')
```

This method enables initialization with.

```
my_obj = MyRLP.from_dict({'name1': 1, 'name2': b'\xff'})
```

In general, the standard initialization is preferred, but some approaches might favor this API, like when using `toolz.functoolz.pipe()`.

```
return eth_utils.toolz.pipe(
    my_dict,
    normalize,
    validate,
    MyRLP.from_dict,
)
```

Parameters

field_dict (`dict`) – the dictionary of values to initialize with

Returns

the new rlp object

Return type

HashableRLP

hash() → `HexBytes`

Returns

the hash of the encoded bytestring

Return type

HexBytes

1.2 Release Notes

1.2.1 eth-rlp v0.3.0 (2022-01-19)

1.2.2 Eth_Rlp 0.3.0 (2022-01-19)

Features

- Add support for python 3.8-3.10 (#12)
- Require eth-utils>=2.0,<3 (#14)

Deprecations and Removals

- Remove support for Python 3.6 ([#13](#))

1.2.3 eth-rlp v0.2.0 (2020-09-01)

Features

- Add support for pyrlp v2.0.0-alpha.1 (as long as you don't use pypy) ([#8](#))

Deprecations and Removals

- Dropped py3.5 support ([#7](#))

Miscellaneous changes

- Merge updates from the project template ([#7](#))

1.2.4 v0.1.2

Released April 25, 2018

- Add `as_dict()` as a shim for joint v0/v1 compatibility

1.2.5 v0.1.1

Released April 25, 2018

- Add support for rlp version 1 (but still backwards-compatible with v0)

1.2.6 v0.1.0

Released Mar 1, 2018

- Marked stable
- Upgraded eth-utils and hexbytes to stable versions
- Add pypy3 support

1.2.7 v0.1.0-alpha.2

Released Jan 30, 2018

- First working version
- Some docs
- New basic tests, that pass

1.2.8 v0.1.0-alpha.1

- Launched repository, claimed names for pip, RTD, github, etc

**CHAPTER
TWO**

INDICES AND TABLES

- genindex
- modindex

PYTHON MODULE INDEX

e

eth_rlp.main, 3

INDEX

A

`as_dict()` (*eth_rlp.main.HashableRLP method*), 3

E

`eth_rlp.main`
 module, 3

F

`from_bytes()` (*eth_rlp.main.HashableRLP class*
 method), 3
`from_dict()` (*eth_rlp.main.HashableRLP class*
 method), 3

H

`hash()` (*eth_rlp.main.HashableRLP method*), 4
`HashableRLP` (*class in eth_rlp.main*), 3

M

`module`
 `eth_rlp.main`, 3