
krakenex Documentation

Release 1.0.0

Noel Maersk

Sep 18, 2017

Contents

1	Interface classes	1
	Python Module Index	5

CHAPTER 1

Interface classes

General-use interface provided by *krakenex*.

Internally, classes are in separate modules, but they are also exported to the top-level namespace, so the following uses are possible:

```
# recommended, unlikely to result in namespace collisions
import krakenex
k = krakenex.API()
c = krakenex.Connection()

# OK for simple scripts
from krakenex import *
k = API()
c = Connection()

# can be explicit in both cases
k = krakenex.api.API()
c = krakenex.connection.Connection()
```

class `krakenex.API` (*key='', secret='', conn=None*)

Bases: `object`

Maps a key/secret pair to a connection.

Specifying either the pair or the connection is optional.

Note: If a connection is not set, a new one will be opened on first query. If a connection is set, during creation or as a result of a previous query, it will be reused for subsequent queries. However, its state is not checked.

Note: No timeout handling or query rate limiting is performed.

Note: If a private query is performed without setting a key/secret pair, the effects are undefined.

`__init__` (*key*='', *secret*='', *conn*=None)

Create an object with authentication information.

Parameters

- **key** (*str*) – key required to make queries to the API
- **secret** (*str*) – private key used to sign API messages
- **conn** (`krakenex.Connection`) – existing connection object to use

Returns None

`__module__` = 'krakenex.api'

`__query` (*urlpath*, *req*, *conn*=None, *headers*=None)

Low-level query handling.

If a connection object is provided, attempts to use that specific connection.

If it is not provided, attempts to reuse a connection from the previous query.

If this is the first ever query, opens a new connection, and keeps it as a fallback for future queries.

Connection state is not checked.

Warning: The fallback connection will be re-used for both public and private queries.

Note: Preferably use `query_private()` or `query_public()` instead.

Parameters

- **urlpath** (*str*) – API URL path sans host
- **req** (*dict*) – API request parameters
- **conn** (`krakenex.Connection`) – (optional) existing connection object to use
- **headers** (*dict*) – (optional) HTTPS headers

Returns `json.loads()` -deserialised Python object

`load_key` (*path*)

Load key and secret from file.

Expected file format is key and secret on separate lines.

Parameters **path** (*str*) – path to keyfile

Returns None

`query_private` (*method*, *req*=None, *conn*=None)

API queries that require a valid key/secret pair.

Parameters

- **method** (*str*) – API method name
- **req** (*dict*) – (optional) API request parameters

- **conn** (`krakenex.Connection`) – (optional) connection object to use

Returns `json.loads()` -deserialised Python object

query_public (*method, req=None, conn=None*)

API queries that do not require a valid key/secret pair.

Parameters

- **method** (*str*) – API method name
- **req** (*dict*) – (optional) API request parameters
- **conn** (`krakenex.Connection`) – (optional) connection object to use

Returns `json.loads()` -deserialised Python object

set_connection (*conn*)

Set an existing connection to be used as a default in queries.

Deprecated since version 1.0.0: Access the object's `conn` attribute directly.

Parameters **conn** (`krakenex.Connection`) – existing connection object to use

Returns None

class `krakenex.Connection` (*uri='api.kraken.com', timeout=30*)

Bases: `object`

Object representing a single connection.

Opens a reusable HTTPS connection. Allows specifying HTTPS timeout, or server URI (for testing purposes).

__init__ (*uri='api.kraken.com', timeout=30*)

Create an object for reusable connections.

Parameters

- **uri** (*str*) – URI to connect to
- **timeout** (*int*) – blocking operations' timeout (in seconds)

Returns None

__module__ = `'krakenex.connection'`

__request (*url, req=None, headers=None*)

Send POST request to API server using this connection.

If not provided, sets empty request parameters and HTTPS headers for this request.

Parameters

- **url** (*str*) – fully-qualified URL with all necessary urlencoded information
- **req** (*dict*) – (optional) API request parameters
- **headers** (*dict*) – (optional) HTTPS headers, such as API-Key and API-Sign

Returns `http.client`-decoded response

Raises `http.client.HTTPException`: if response status not successful

close ()

Close this connection.

Returns None

k

krakenex, [1](#)

Symbols

`__init__()` (krakenex.API method), 2
`__init__()` (krakenex.Connection method), 3
`__module__` (krakenex.API attribute), 2
`__module__` (krakenex.Connection attribute), 3
`_query()` (krakenex.API method), 2
`_request()` (krakenex.Connection method), 3

A

API (class in krakenex), 1

C

`close()` (krakenex.Connection method), 3
Connection (class in krakenex), 3

K

krakenex (module), 1

L

`load_key()` (krakenex.API method), 2

Q

`query_private()` (krakenex.API method), 2
`query_public()` (krakenex.API method), 3

S

`set_connection()` (krakenex.API method), 3