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# **krakenex Documentation**

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# CHAPTER 1

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## Interface classes

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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
kraken = krakenex.API()

# OK for simple scripts
from krakenex import *
kraken = API()

# can be explicit in both cases
# <some import form here>
kraken = krakenex.api.API()
```

**class** krakenex.**API**(*key*='', *secret*='')

Bases: `object`

Maintains a single session between this machine and Kraken.

Specifying a key/secret pair is optional. If not specified, private queries will not be possible.

The `session` attribute is a `requests.Session` object. Customise networking options by manipulating it.

Query responses, as received by `requests`, are retained as attribute `response` of this object. It is overwritten on each query.

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**Note:** No query rate limiting is performed.

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**\_\_init\_\_(*key*='', *secret*='')**

Create an object with authentication information.

**Parameters**

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- **key** (*str*) – (optional) key identifier for queries to the API
- **secret** (*str*) – (optional) actual private key used to sign messages

**Returns** None

`__module__ = 'krakenex.api'`

`_nonce()`

Nonce counter.

**Returns** an always-increasing unsigned integer (up to 64 bits wide)

`_query(urlpath, data, headers=None, timeout=None)`

Low-level query handling.

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**Note:** Use `query_private()` or `query_public()` unless you have a good reason not to.

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#### Parameters

- **urlpath** (*str*) – API URL path sans host
- **data** (*dict*) – API request parameters
- **headers** (*dict*) – (optional) HTTPS headers
- **timeout** (*int or float*) – (optional) if not None, a `requests.HTTPError` will be thrown after `timeout` seconds if a response has not been received

**Returns** `requests.Response.json()` -deserialised Python object

**Raises** `requests.HTTPError`: if response status not successful

`_sign(data, urlpath)`

Sign request data according to Kraken's scheme.

#### Parameters

- **data** (*dict*) – API request parameters
- **urlpath** (*str*) – API URL path sans host

**Returns** signature digest

`close()`

Close this session.

**Returns** None

`json_options(**kwargs)`

Set keyword arguments to be passed to JSON deserialization.

**Parameters** `kwargs` – passed to `requests.Response.json()`

**Returns** this instance for chaining

`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, data=None, timeout=None)

Performs an API query that requires a valid key/secret pair.

**Parameters**

- **method** (*str*) – API method name
- **data** (*dict*) – (optional) API request parameters
- **timeout** (*int or float*) – (optional) if not None, a `requests.HTTPError` will be thrown after `timeout` seconds if a response has not been received

**Returns** `requests.Response.json()` -deserialised Python object

**query\_public**(method, data=None, timeout=None)

Performs an API query that does not require a valid key/secret pair.

**Parameters**

- **method** (*str*) – API method name
- **data** (*dict*) – (optional) API request parameters
- **timeout** (*int or float*) – (optional) if not None, a `requests.HTTPError` will be thrown after `timeout` seconds if a response has not been received

**Returns** `requests.Response.json()` -deserialised Python object



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## Python Module Index

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