
yourls Documentation

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Contents:

Usage

1.1 Installation

```
$ pip install yourls
```

1.2 Overview

yourls is a Python client for your **YOURLS** server. The API is fairly simple, and API errors are turned into Python exceptions.

The main functionality is shown here:

```
>>> from yourls import YOURLSClient

>>> yourls = YOURLSClient('http://example.com/yourls-api.php', signature='6f344c2a8p')
>>> shorturl = yourls.shorten('http://google.com')
>>> shorturl
ShortenedURL(
  shorturl='http://example.com/abcde',
  url='http://google.com',
  title='Google',
  date=datetime.datetime(2015, 10, 31, 14, 31, 4),
  ip='203.0.113.0',
  clicks=0,
  keyword='abcde')

>>> yourls.expand('abcde')
'http://google.com'
>>> yourls.expand('http://example.com/abcde')
'http://google.com'

>>> yourls.url_stats('abcde')
ShortenedURL(
  shorturl='http://example.com/abcde',
  url='http://google.com',
  title='Google',
  date=datetime.datetime(2015, 10, 31, 14, 31, 4),
  ip='203.0.113.0',
  clicks=0,
  keyword='abcde')

>>> links, stats = yourls.stats(filter='random', limit=2)
>>> links
[ShortenedURL(
  shorturl='http://example.com/abcde',
```

```
url='http://google.com',
title='Google',
date=datetime.datetime(2015, 10, 31, 14, 31, 4),
ip='203.0.113.0',
clicks=2,
keyword='abcde'),
ShortenedURL(
    shorturl='http://example.com/gd65t',
    url='http://www.youtube.com',
    title='YouTube',
    date=datetime.datetime(2015, 10, 31, 11, 34, 5),
    ip='203.0.113.0',
    clicks=567,
    keyword='gd65t')]
>>> stats
DBStats(total_clicks=1234, total_links=5678)

>>> yourls.db_stats()
DBStats(total_clicks=1234, total_links=5678)
```

1.3 Exception Handling

The `YOURLSClient` methods can raise several exceptions. With the exception of `YOURLSURLExistsError` and `YOURLSKeywordExistsError`, they all inherit from `requests.HTTPError`, so it's not necessary to catch all the exceptions individually if you just want to display the error to the user:

```
try:
    shorturl = yourls.shorten(url, keyword=keyword)
except YOURLSURLExistsError as exc:
    shorturl = exc.url
except YOURLSKeywordExistsError as exc:
    print("Keyword '{}' already exists.".format(exc.keyword))
except requests.HTTPError as exc:
    print(exc.args[0])
```

See also:

`Requests` itself can raise more exceptions, so you might want to catch `requests.exceptions.RequestException`.

Errors and Exceptions: In the event of a network problem (e.g. DNS failure, refused connection, etc), `Requests` will raise a `ConnectionError` exception.

In the rare event of an invalid HTTP response, `Requests` will raise an `HTTPError` exception.

If a request times out, a `Timeout` exception is raised.

If a request exceeds the configured number of maximum redirections, a `TooManyRedirects` exception is raised.

All exceptions that `Requests` explicitly raises inherit from `requests.exceptions.RequestException`.

1.4 Logging

Logging is disabled by default. Let's enable the logger and set up a logbook handler.

```
from logbook import StderrHandler
from yourls import YOURLSClient, logger

logger.disabled = False
```



```
yourls = YOURLSClient('http://example.com/yourls-api.php', signature='6f344c2a8p')

with StderrHandler():
    yourls.shorten('http://www.google.com')
```

Here, *logger* is an instance of `logbook.Logger`. By default, the level is set to `logbook.NOTSET` (i.e. everything is logged).

In our example, we would see the following output:

```
[2015-11-01 17:15:57.899368] DEBUG: yourls: Received <Response [200]> with JSON {'message': 'http
```

1.5 API Plugins

If you want to support YOURLS plugins that add API methods (e.g. [API Delete](#)), the following is the recommended way to do so.

```
from yourls import YOURLSClientBase, YOURLSAPIMixin

class YOURLSDeleteMixin(object):
    def delete(short):
        data = dict(action='delete', shorturl=short)
        self._api_request(params=data)

class YOURLSClient(YOURLSDeleteMixin, YOURLSAPIMixin, YOURLSClientBase):
    """YOURLS client with API delete support."""
```

Command Line Interface

You can invoke `yourls` or `python -m yourls` on the command line.

```
$ yourls
Usage: yourls [OPTIONS] COMMAND [ARGS]...

Command line interface for YOURLS.

Configuration parameters can be passed as switches or stored in .yourls or
~/.yourls.

Please provide one of the following:
• apiurl and signature
• apiurl, username, and password

Configuration file format:

[yourls]
apiurl = http://example.com/yourls-api.php
signature = abcdefghij

Options:
  --apiurl TEXT
  --signature TEXT
  --username TEXT
  --password TEXT
  --help          Show this message and exit.

Commands:
  db-stats
  expand
  shorten
  stats
  url-stats
```

You can see help for individual commands: `yourls shorten --help` etc.

Module Reference

3.1 Core

Note: The contents of this module are placed here for organisational reasons. They should be imported from `yourls`.

class `yourls.core.YOURLSAPIMixin`

Bases: `object`

Mixin to provide default YOURLS API methods.

db_stats()

Get database statistics.

Returns Total clicks and links statistics.

Return type *DBStats*

Raises `requests.exceptions.HTTPError` – Generic HTTP Error

expand(*short*)

Expand short URL or keyword to long URL.

Parameters **short** – Short URL (`http://example.com/abc`) or keyword (`abc`).

Returns Expanded/long URL, e.g. `https://www.youtube.com/watch?v=dQw4w9WgXcQ`

Raises

- *YOURLSHTTPError* – HTTP error with response from YOURLS API.
- `requests.exceptions.HTTPError` – Generic HTTP error.

shorten(*url*, *keyword=None*, *title=None*)

Shorten URL with optional keyword and title.

Parameters

- **url** – URL to shorten.
- **keyword** – Optionally choose keyword for short URL, otherwise automatic.
- **title** – Optionally choose title, otherwise taken from web page.

Returns Shortened URL and associated data.

Return type *ShortenedURL*

Raises

- `YOURLSKeywordExistsError` – The passed keyword already exists.

Note: This exception has a `keyword` attribute.

- `YOURLSURLExistsError` – The URL has already been shortened.

Note: This exception has a `url` attribute, which is an instance of `ShortenedURL` for the existing short URL.

- `YOURLSNoURLError` – URL missing.
- `YOURLSNoLoopError` – Cannot shorten a shortened URL.
- `YOURLSAPIError` – Unhandled API error.
- `YOURLSHTTPError` – HTTP error with response from YOURLS API.
- `requests.exceptions.HTTPError` – Generic HTTP error.

stats (*filter*, *limit*, *start=None*)
Get stats about links.

Parameters

- **filter** – ‘top’, ‘bottom’, ‘rand’, or ‘last’.
- **limit** – Number of links to return from filter.
- **start** – Optional start number.

Returns Tuple containing list of `ShortenedURL`s and `DBStats`.

Example

```
links, stats = yourls.stats(filter='top', limit=10)
```

Raises

- `ValueError` – Incorrect value for filter parameter.
- `requests.exceptions.HTTPError` – Generic HTTP Error

url_stats (*short*)
Get stats for short URL or keyword.

Parameters **short** – Short URL (<http://example.com/abc>) or keyword (abc).

Returns Shortened URL and associated data.

Return type `ShortenedURL`

Raises

- `YOURLSHTTPError` – HTTP error with response from YOURLS API.
- `requests.exceptions.HTTPError` – Generic HTTP error.

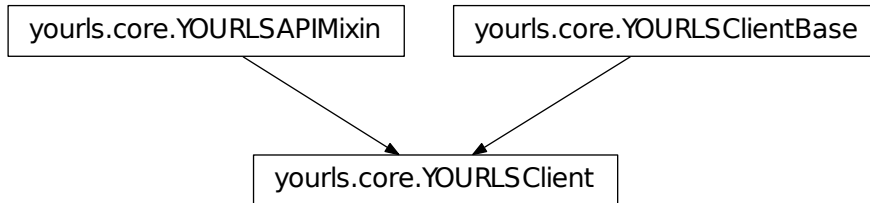
class `yourls.core.YOURLSClient` (*apiurl*, *username=None*, *password=None*, *signature=None*)
Bases: `yourls.core.YOURLSAPIMixin`, `yourls.core.YOURLSClientBase`
YOURLS client.

```
class yourls.core.YOURLSClientBase (apiurl, username=None, password=None, signature=None)
```

Bases: `object`

Base class for YOURLS client that provides initialiser and api request method.

3.1.1 Inheritance diagram



3.2 Data

Note: The contents of this module are placed here for organisational reasons. They should be imported from `yourls`.

```
class yourls.data.DBStats (total_clicks, total_links)
```

Represent database statistics as returned by the YOURLS API.

total_clicks

Total number of clicks across all links in the database.

total_links

Total number of links in the database.

```
class yourls.data.ShortenedURL (shorturl, url, title, date, ip, clicks, keyword=None)
```

Represent shortened URL data as returned by the YOURLS API.

keyword

Short URL keyword, e.g. `abcdef` for `http://example.com/abcdef`.

url

Long URL that was shortened.

title

URL page title.

date

`datetime` of timestamp the URL was shortened.

ip

IP address that originally shortened the URL.

clicks

Number of clicks the shortened URL has received.

3.3 Exceptions

Note: The contents of this module are placed here for organisational reasons. They should be imported from `yourls`.

exception `yourls.exceptions.YOURLSAPIError` (*args, **kwargs)

Bases: `Exception`

Base exception.

exception `yourls.exceptions.YOURLSHTTPError` (*args, **kwargs)

Bases: `yourls.exceptions.YOURLSAPIError`, `requests.exceptions.HTTPError`

Raised when YOURLS API returns HTTP error with response.

exception `yourls.exceptions.YOURLSKeywordExistsError` (*args, **kwargs)

Bases: `yourls.exceptions.YOURLSAPIError`

Raised when a chosen keyword already exists.

keyword

Existing keyword.

exception `yourls.exceptions.YOURLSNoLoopError` (*args, **kwargs)

Bases: `yourls.exceptions.YOURLSHTTPError`

Raised when trying to shorten a shortened URL.

exception `yourls.exceptions.YOURLSNoURLError` (*args, **kwargs)

Bases: `yourls.exceptions.YOURLSHTTPError`

Raised when trying to shorten an empty URL.

exception `yourls.exceptions.YOURLSURLExistsError` (*args, **kwargs)

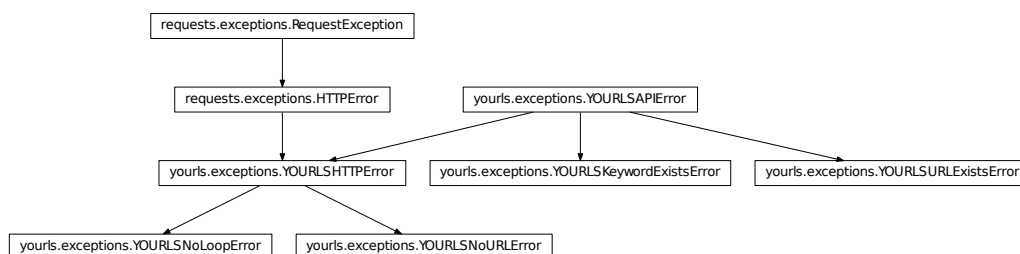
Bases: `yourls.exceptions.YOURLSAPIError`

Raised when a URL has already been shortened.

url

Instance of `ShortenedURL` for existing URL.

3.3.1 Inheritance diagram



Change Log

4.1 Unreleased

N/A

4.2 1.2.2 - 2016-01-29

4.2.1 Fixed

- Exceptions used incorrect `super()` calls.
- Conditional dependencies now work with wheel format.

4.3 1.2.1 - 2015-11-24

4.3.1 Fixed

- Unicode handling on Python 2 in CLI.

4.4 1.2.0 - 2015-11-16

4.4.1 Changed

- Nicer CLI output for `ShortenedURL` and `DBStats` objects.

4.4.2 Fixed

- `NoSectionError` with blank configuration file (#2)
- Short option for `--start` when calling `yourls stats` changed to `-b` to prevent conflict with `-s` for `--simple` (#1).

4.5 1.1.1 - 2015-11-15

4.5.1 Fixed

- Fixed CLI on Python 2 due to incorrect use of `ConfigParser`.
- Incorrect `ConfigParser` import.

4.6 1.1.0 - 2015-11-15

4.6.1 Added

- [Command line interface](#).
- Documentation section on exception handling.

4.6.2 Changed

- Rename `yourls.api` sub-module to `yourls.data`.
- Rename `yourls.exc` sub-module to `yourls.exceptions`. Users should be importing directly from `yourls` anyway.

4.7 1.0.1 - 2015-11-01

4.7.1 Added

- Added usage page to documentation.

4.7.2 Changed

- Split `YOURLSClient` class into `YOURLSClientBase` and `YOURLSAPIMixin` to make it easier to re-use.
- Refactored the code for clarity.

4.8 1.0.0 - 2015-11-01

First release.

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