# tweepy Documentation

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## Contents

1	Installation	3
2	Getting started 2.1 Introduction	5 5 5 5 6
3	Authentication Tutorial 3.1 Introduction	<b>7</b> 7 7 9
4	4.1 Introduction          4.2 OAuth          4.3 Pagination          4.4 FollowAll	11 11 11 11 12 12
5	5.1 Introduction	13 13 14 14 14
6	6.1 Introduction	15 15 16 16 16
7	7.1 Summary	19 19 20

	7.3 7.4	Step 2: Creating a <b>Stream</b>	20 20				
	7.5	A Few More Pointers	20				
8	API I	Reference	23				
9	twee	epy.api — Twitter API wrapper	25				
	9.1	Timeline methods	26				
	9.2	Status methods	27				
	9.3	User methods	30				
	9.4	Direct Message Methods	32				
	9.5	Friendship Methods	33				
	9.6	Account Methods	34				
	9.7	Favorite Methods	35				
	9.8	Block Methods	36				
	9.9	Mute Methods	37				
	9.10	Spam Reporting Methods	38				
	9.11	Saved Searches Methods	38				
	9.12	Search Methods	38				
	9.13	List Methods	41				
	9.14	Trends Methods	47				
	9.15	Geo Methods	48				
	9.16	Utility methods	49				
	9.17	Media methods	49				
10	twee	epy.error — Exceptions	51				
11	Runn	ning Tests	53				
12	Indic	es and tables	55				
	ndex 5						

Contents:

Contents 1

2 Contents

## CHAPTER 1

Installation

The easiest way to install the latest version from PyPI is by using pip:

pip install tweepy

You can also use Git to clone the repository from GitHub to install the latest development version:

git clone https://github.com/tweepy/tweepy.git
cd tweepy
pip install .

Alternatively, install directly from the GitHub repository:

pip install git+https://github.com/tweepy/tweepy.git

## CHAPTER 2

Getting started

## 2.1 Introduction

If you are new to Tweepy, this is the place to begin. The goal of this tutorial is to get you set-up and rolling with Tweepy. We won't go into too much detail here, just some important basics.

## 2.2 Hello Tweepy

```
import tweepy
auth = tweepy.OAuthHandler(consumer_key, consumer_secret)
auth.set_access_token(access_token, access_token_secret)

api = tweepy.API(auth)

public_tweets = api.home_timeline()
for tweet in public_tweets:
    print(tweet.text)
```

This example will download your home timeline tweets and print each one of their texts to the console. Twitter requires all requests to use OAuth for authentication. The *Authentication Tutorial* goes into more details about authentication.

## 2.3 API

The API class provides access to the entire twitter RESTful API methods. Each method can accept various parameters and return responses. For more information about these methods please refer to *API Reference*.

## 2.4 Models

When we invoke an API method most of the time returned back to us will be a Tweepy model class instance. This will contain the data returned from Twitter which we can then use inside our application. For example the following code returns to us a User model:

```
# Get the User object for twitter...
user = api.get_user('twitter')
```

Models contain the data and some helper methods which we can then use:

```
print(user.screen_name)
print(user.followers_count)
for friend in user.friends():
    print(friend.screen_name)
```

For more information about models please see ModelsReference.

### **Authentication Tutorial**

#### 3.1 Introduction

Tweepy supports both OAuth 1a (application-user) and OAuth 2 (application-only) authentication. Authentication is handled by the tweepy. AuthHandler class.

### 3.2 OAuth 1a Authentication

Tweepy tries to make OAuth 1a as painless as possible for you. To begin the process we need to register our client application with Twitter. Create a new application and once you are done you should have your consumer key and secret. Keep these two handy, you'll need them.

The next step is creating an OAuthHandler instance. Into this we pass our consumer key and secret which was given to us in the previous paragraph:

```
auth = tweepy.OAuthHandler(consumer_key, consumer_secret)
```

If you have a web application and are using a callback URL that needs to be supplied dynamically you would pass it in like so:

```
auth = tweepy.OAuthHandler(consumer_key, consumer_secret,
callback_url)
```

If the callback URL will not be changing, it is best to just configure it statically on twitter.com when setting up your application's profile.

Unlike basic auth, we must do the OAuth 1a "dance" before we can start using the API. We must complete the following steps:

- 1. Get a request token from twitter
- 2. Redirect user to twitter.com to authorize our application

- 3. If using a callback, twitter will redirect the user to us. Otherwise the user must manually supply us with the verifier code.
- 4. Exchange the authorized request token for an access token.

So let's fetch our request token to begin the dance:

```
try:
    redirect_url = auth.get_authorization_url()
except tweepy.TweepError:
    print('Error! Failed to get request token.')
```

This call requests the token from twitter and returns to us the authorization URL where the user must be redirect to authorize us. Now if this is a desktop application we can just hang onto our OAuthHandler instance until the user returns back. In a web application we will be using a callback request. So we must store the request token in the session since we will need it inside the callback URL request. Here is a pseudo example of storing the request token in a session:

```
session.set('request_token', auth.request_token['oauth_token'])
```

So now we can redirect the user to the URL returned to us earlier from the get\_authorization\_url() method.

If this is a desktop application (or any application not using callbacks) we must query the user for the "verifier code" that twitter will supply them after they authorize us. Inside a web application this verifier value will be supplied in the callback request from twitter as a GET query parameter in the URL.

```
# Example using callback (web app)
verifier = request.GET.get('oauth_verifier')

# Example w/o callback (desktop)
verifier = raw_input('Verifier:')
```

The final step is exchanging the request token for an access token. The access token is the "key" for opening the Twitter API treasure box. To fetch this token we do the following:

It is a good idea to save the access token for later use. You do not need to re-fetch it each time. Twitter currently does not expire the tokens, so the only time it would ever go invalid is if the user revokes our application access. To store the access token depends on your application. Basically you need to store 2 string values: key and secret:

```
auth.access_token
auth.access_token_secret
```

You can throw these into a database, file, or where ever you store your data. To re-build an OAuthHandler from this stored access token you would do this:

```
auth = tweepy.OAuthHandler(consumer_key, consumer_secret)
auth.set_access_token(key, secret)
```

So now that we have our OAuthHandler equipped with an access token, we are ready for business:

```
api = tweepy.API(auth)
api.update_status('tweepy + oauth!')
```

#### 3.3 OAuth 2 Authentication

Tweepy also supports OAuth 2 authentication. OAuth 2 is a method of authentication where an application makes API requests without the user context. Use this method if you just need read-only access to public information.

Like OAuth 1a, we first register our client application and acquire a consumer key and secret.

Then we create an AppAuthHandler instance, passing in our consumer key and secret:

```
auth = tweepy.AppAuthHandler(consumer_key, consumer_secret)
```

With the bearer token received, we are now ready for business:

```
api = tweepy.API(auth)
for tweet in tweepy.Cursor(api.search, q='tweepy').items(10):
    print(tweet.text)
```

## CHAPTER 4

**Code Snippets** 

## 4.1 Introduction

Here are some code snippets to help you out with using Tweepy. Feel free to contribute your own snippets or improve the ones here!

## 4.2 OAuth

```
auth = tweepy.OAuthHandler("consumer_key", "consumer_secret")

# Redirect user to Twitter to authorize
redirect_user(auth.get_authorization_url())

# Get access token
auth.get_access_token("verifier_value")

# Construct the API instance
api = tweepy.API(auth)
```

## 4.3 Pagination

```
# Iterate through all of the authenticated user's friends
for friend in tweepy.Cursor(api.friends).items():
    # Process the friend here
    process_friend(friend)

# Iterate through the first 200 statuses in the home timeline
for status in tweepy.Cursor(api.home_timeline).items(200):
```

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```
# Process the status here
process_status(status)
```

#### 4.4 FollowAll

This snippet will follow every follower of the authenticated user.

```
for follower in tweepy.Cursor(api.followers).items():
    follower.follow()
```

## 4.5 Handling the rate limit using cursors

Since cursors raise RateLimitErrors in their next () method, handling them can be done by wrapping the cursor in an iterator.

Running this snippet will print all users you follow that themselves follow less than 300 people total - to exclude obvious spambots, for example - and will wait for 15 minutes each time it hits the rate limit.

```
# In this example, the handler is time.sleep(15 * 60),
# but you can of course handle it in any way you want.

def limit_handled(cursor):
    while True:
        try:
            yield cursor.next()
        except tweepy.RateLimitError:
              time.sleep(15 * 60)

for follower in limit_handled(tweepy.Cursor(api.followers).items()):
    if follower.friends_count < 300:
        print(follower.screen_name)</pre>
```

**Cursor Tutorial** 

This tutorial describes details on pagination with Cursor objects.

### 5.1 Introduction

We use pagination a lot in Twitter API development. Iterating through timelines, user lists, direct messages, etc. In order to perform pagination, we must supply a page/cursor parameter with each of our requests. The problem here is this requires a lot of boiler plate code just to manage the pagination loop. To help make pagination easier and require less code, Tweepy has the Cursor object.

## 5.2 Old way vs Cursor way

First let's demonstrate iterating the statuses in the authenticated user's timeline. Here is how we would do it the "old way" before the Cursor object was introduced:

```
page = 1
while True:
    statuses = api.user_timeline(page=page)
    if statuses:
        for status in statuses:
            # process status here
            process_status(status)

else:
        # All done
        break
page += 1 # next page
```

As you can see, we must manage the "page" parameter manually in our pagination loop. Now here is the version of the code using the Cursor object:

```
for status in tweepy.Cursor(api.user_timeline).items():
    # process status here
    process_status(status)
```

Now that looks much better! Cursor handles all the pagination work for us behind the scenes, so our code can now focus entirely on processing the results.

## 5.3 Passing parameters into the API method

What if you need to pass in parameters to the API method?

```
api.user_timeline(id="twitter")
```

Since we pass Cursor the callable, we can not pass the parameters directly into the method. Instead we pass the parameters into the Cursor constructor method:

```
tweepy.Cursor(api.user_timeline, id="twitter")
```

Now Cursor will pass the parameter into the method for us whenever it makes a request.

## 5.4 Items or Pages

So far we have just demonstrated pagination iterating per item. What if instead you want to process per page of results? You would use the pages() method:

```
for page in tweepy.Cursor(api.user_timeline).pages():
    # page is a list of statuses
    process_page(page)
```

#### 5.5 Limits

What if you only want n items or pages returned? You pass into the items() or pages() methods the limit you want to impose.

```
# Only iterate through the first 200 statuses
for status in tweepy.Cursor(api.user_timeline).items(200):
    process_status(status)

# Only iterate through the first 3 pages
for page in tweepy.Cursor(api.user_timeline).pages(3):
    process_page(page)
```

**Extended Tweets** 

This supplements Twitter's Tweet updates documentation.

### 6.1 Introduction

On May 24, 2016, Twitter announced changes to the way that replies and URLs are handled and published plans around support for these changes in the Twitter API and initial technical documentation describing the updates to Tweet objects and API options.<sup>1</sup> On September 26, 2017, Twitter started testing 280 characters for certain languages,<sup>2</sup> and on November 7, 2017, announced that the character limit was being expanded for Tweets in languages where cramming was an issue.<sup>3</sup>

#### 6.2 Standard API methods

Any tweepy. API method that returns a Status object accepts a new tweet\_mode parameter. Valid values for this parameter are compat and extended, which give compatibility mode and extended mode, respectively. The default mode (if no parameter is provided) is compatibility mode.

### 6.2.1 Compatibility mode

By default, using compatibility mode, the text attribute of Status objects returned by tweepy. API methods is truncated to 140 characters, as needed. When this truncation occurs, the truncated attribute of the Status object will be True, and only entities that are fully contained within the available 140 characters range will be included in the entities attribute. It will also be discernible that the text attribute of the Status object is truncated as it will be suffixed with an ellipsis character, a space, and a shortened self-permalink URL to the Tweet.

<sup>&</sup>lt;sup>1</sup> https://twittercommunity.com/t/upcoming-changes-to-simplify-replies-and-links-in-tweets/67497

<sup>&</sup>lt;sup>2</sup> https://twittercommunity.com/t/testing-280-characters-for-certain-languages/94126

<sup>&</sup>lt;sup>3</sup> https://twittercommunity.com/t/updating-the-character-limit-and-the-twitter-text-library/96425

#### 6.2.2 Extended mode

When using extended mode, the text attribute of Status objects returned by tweepy. API methods is replaced by a full\_text attribute, which contains the entire untruncated text of the Tweet. The truncated attribute of the Status object will be False, and the entities attribute will contain all entities. Additionally, the Status object will have a display\_text\_range attribute, an array of two Unicode code point indices, identifying the inclusive start and exclusive end of the displayable content of the Tweet.

## 6.3 Streaming

By default, the Status objects from streams may contain an <code>extended\_tweet</code> attribute representing the equivalent field in the raw data/payload for the Tweet. This attribute/field will only exist for extended Tweets, containing a dictionary of sub-fields. The <code>full\_text</code> sub-field/key of this dictionary will contain the full, untruncated text of the Tweet, and the <code>entities</code> sub-field/key will contain the full set of entities. If there are extended entities, the <code>extended\_entities</code> sub-field/key will contain the full set of those. Additionally, the <code>display\_text\_range</code> sub-field/key will contain an array of two Unicode code point indices, identifying the inclusive start and exclusive end of the displayable content of the Tweet.

## 6.4 Handling Retweets

When using extended mode with a Retweet, the full\_text attribute of the Status object may be truncated with an ellipsis character instead of containing the full text of the Retweet. However, since the retweeted\_status attribute (of a Status object that is a Retweet) is itself a Status object, the full\_text attribute of the Retweeted Status object can be used instead.

This also applies similarly to Status objects/payloads that are Retweets from streams. The dictionary from the extended\_tweet attribute/field contains a full\_text sub-field/key that may be truncated with an ellipsis character. Instead, the extended\_tweet attribute/field of the Retweeted Status (from the retweeted\_status attribute/field) can be used.

## 6.5 Examples

Given an existing tweepy. API object and id for a Tweet, the following can be used to print the full text of the Tweet, or if it's a Retweet, the full text of the Retweeted Tweet:

```
status = api.get_status(id, tweet_mode="extended")
try:
    print(status.retweeted_status.full_text)
except AttributeError: # Not a Retweet
    print(status.full_text)
```

If status is a Retweet, status.full\_text could be truncated.

This Status event handler for a StreamListener prints the full text of the Tweet, or if it's a Retweet, the full text of the Retweeted Tweet:

```
def on_status(self, status):
   if hasattr(status, "retweeted_status"): # Check if Retweet
        try:
        print(status.retweeted_status.extended_tweet["full_text"])
```

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If status is a Retweet, it will not have an extended\_tweet attribute, and status.text could be truncated.

6.5. Examples 17

## Streaming With Tweepy

Tweepy makes it easier to use the twitter streaming api by handling authentication, connection, creating and destroying the session, reading incoming messages, and partially routing messages.

This page aims to help you get started using Twitter streams with Tweepy by offering a first walk through. Some features of Tweepy streaming are not covered here. See streaming.py in the Tweepy source code.

API authorization is required to access Twitter streams. Follow the *Authentication Tutorial* if you need help with authentication.

## 7.1 Summary

The Twitter streaming API is used to download twitter messages in real time. It is useful for obtaining a high volume of tweets, or for creating a live feed using a site stream or user stream. See the Twitter Streaming API Documentation.

The streaming api is quite different from the REST api because the REST api is used to *pull* data from twitter but the streaming api *pushes* messages to a persistent session. This allows the streaming api to download more data in real time than could be done using the REST API.

In Tweepy, an instance of **tweepy.Stream** establishes a streaming session and routes messages to **StreamListener** instance. The **on\_data** method of a stream listener receives all messages and calls functions according to the message type. The default **StreamListener** can classify most common twitter messages and routes them to appropriately named methods, but these methods are only stubs.

Therefore using the streaming api has three steps.

- 1. Create a class inheriting from StreamListener
- 2. Using that class create a Stream object
- 3. Connect to the Twitter API using the **Stream**.

## 7.2 Step 1: Creating a StreamListener

This simple stream listener prints status text. The **on\_data** method of Tweepy's **StreamListener** conveniently passes data from statuses to the **on\_status** method. Create class **MyStreamListener** inheriting from **StreamListener** and overriding **on\_status**.:

```
import tweepy
#override tweepy.StreamListener to add logic to on_status
class MyStreamListener(tweepy.StreamListener):

    def on_status(self, status):
        print(status.text)
```

## 7.3 Step 2: Creating a Stream

We need an api to stream. See *Authentication Tutorial* to learn how to get an api object. Once we have an api and a status listener we can create our stream object.:

```
myStreamListener = MyStreamListener()
myStream = tweepy.Stream(auth = api.auth, listener=myStreamListener)
```

## 7.4 Step 3: Starting a Stream

A number of twitter streams are available through Tweepy. Most cases will use filter, the user\_stream, or the sitestream. For more information on the capabilities and limitations of the different streams see Twitter Streaming API Documentation.

In this example we will use **filter** to stream all tweets containing the word *python*. The **track** parameter is an array of search terms to stream.

```
myStream.filter(track=['python'])
```

This example shows how to use filter to stream tweets by a specific user. The follow parameter is an array of IDs.

```
myStream.filter(follow=["2211149702"])
```

An easy way to find a single ID is to use one of the many conversion websites: search for 'what is my twitter ID'.

### 7.5 A Few More Pointers

### 7.5.1 Async Streaming

Streams do not terminate unless the connection is closed, blocking the thread. Tweepy offers a convenient **is\_async** parameter on **filter** so the stream will run on a new thread. For example

```
myStream.filter(track=['python'], is_async=True)
```

## 7.5.2 Handling Errors

When using Twitter's streaming API one must be careful of the dangers of rate limiting. If clients exceed a limited number of attempts to connect to the streaming API in a window of time, they will receive error 420. The amount of time a client has to wait after receiving error 420 will increase exponentially each time they make a failed attempt.

Tweepy's **Stream Listener** passes error codes to an **on\_error** stub. The default implementation returns **False** for all codes, but we can override it to allow Tweepy to reconnect for some or all codes, using the backoff strategies recommended in the Twitter Streaming API Connecting Documentation.

```
class MyStreamListener(tweepy.StreamListener):

   def on_error(self, status_code):
        if status_code == 420:
            #returning False in on_error disconnects the stream
            return False

# returning non-False reconnects the stream, with backoff.
```

For more information on error codes from the Twitter API see Twitter Response Codes Documentation.

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**API** Reference

This page contains some basic documentation for the Tweepy module.

## CHAPTER 9

## tweepy.api — Twitter API wrapper

```
class API ([auth_handler=None][, host='api.twitter.com'][, search_host='search.twitter.com'][, cache=None][, api_root='/1'][, search_root="][, retry_count=0][, retry_delay=0][, retry_errors=None][, timeout=60][, parser=ModelParser][, compression=False][, wait_on_rate_limit=False][, wait_on_rate_limit_notify=False][, proxy=None])

This class provides a wrapper for the API as provided by Twitter. The functions provided in this class are listed below.
```

#### **Parameters**

- auth\_handler authentication handler to be used
- host general API host
- search host search API host
- cache cache backend to use
- api\_root general API path root
- search\_root search API path root
- retry\_count default number of retries to attempt when error occurs
- retry\_delay number of seconds to wait between retries
- retry\_errors which HTTP status codes to retry
- timeout The maximum amount of time to wait for a response from Twitter
- parser The object to use for parsing the response from Twitter
- compression Whether or not to use GZIP compression for requests
- wait\_on\_rate\_limit Whether or not to automatically wait for rate limits to replenish
- wait\_on\_rate\_limit\_notify Whether or not to print a notification when Tweepy is waiting for rate limits to replenish
- proxy The full url to an HTTPS proxy to use for connecting to Twitter.

#### 9.1 Timeline methods

## API.home\_timeline([since\_id][, max\_id][, count][, page])

Returns the 20 most recent statuses, including retweets, posted by the authenticating user and that user's friends. This is the equivalent of /timeline/home on the Web.

#### **Parameters**

- **since\_id** Returns only statuses with an ID greater than (that is, more recent than) the specified ID.
- max\_id Returns only statuses with an ID less than (that is, older than) or equal to the specified ID.
- **count** The number of results to try and retrieve per page.
- page Specifies the page of results to retrieve. Note: there are pagination limits.

Return type list of Status objects

API.statuses\_lookup(id\_[, include\_entities][, trim\_user][, map\_][, include\_ext\_alt\_text][, include\_card\_uri])

Returns full Tweet objects for up to 100 tweets per request, specified by the id\_parameter.

#### **Parameters**

- id A list of Tweet IDs to lookup, up to 100
- include\_entities The entities node will not be included when set to false. Defaults to true.
- **trim\_user** A boolean indicating if user IDs should be provided, instead of complete user objects. Defaults to False.
- map\_ A boolean indicating whether or not to include tweets that cannot be shown. Defaults to False.
- include\_ext\_alt\_text If alt text has been added to any attached media entities, this parameter will return an ext\_alt\_text value in the top-level key for the media entity.
- include\_card\_uri A boolean indicating if the retrieved Tweet should include a card\_uri attribute when there is an ads card attached to the Tweet and when that card was attached using the card\_uri value.

Return type list of Status objects

 $\texttt{API.user\_timeline} ( [\textit{id/user\_id/screen\_name} ] [, \textit{since\_id} ] [, \textit{max\_id} ] [, \textit{count} ] [, \textit{page} ] )$ 

Returns the 20 most recent statuses posted from the authenticating user or the user specified. It's also possible to request another user's timeline via the id parameter.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- **screen\_name** Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- **since\_id** Returns only statuses with an ID greater than (that is, more recent than) the specified ID.

- max\_id Returns only statuses with an ID less than (that is, older than) or equal to the specified ID.
- **count** The number of results to try and retrieve per page.
- page Specifies the page of results to retrieve. Note: there are pagination limits.

Return type list of Status objects

```
API.retweets_of_me([since_id][, max_id][, count][, page])
```

Returns the 20 most recent tweets of the authenticated user that have been retweeted by others.

#### **Parameters**

- **since\_id** Returns only statuses with an ID greater than (that is, more recent than) the specified ID.
- max\_id Returns only statuses with an ID less than (that is, older than) or equal to the specified ID.
- **count** The number of results to try and retrieve per page.
- page Specifies the page of results to retrieve. Note: there are pagination limits.

Return type list of Status objects

```
API.mentions_timeline([since_id][, max_id][, count])
```

Returns the 20 most recent mentions, including retweets.

#### **Parameters**

- **since\_id** Returns only statuses with an ID greater than (that is, more recent than) the specified ID.
- max\_id Returns only statuses with an ID less than (that is, older than) or equal to the specified ID.
- **count** The number of results to try and retrieve per page.

Return type list of Status objects

#### 9.2 Status methods

Returns a single status specified by the ID parameter.

#### **Parameters**

- id The numerical ID of the status.
- **trim\_user** A boolean indicating if user IDs should be provided, instead of complete user objects. Defaults to False.
- include\_my\_retweet A boolean indicating if any Tweets returned that have been retweeted by the authenticating user should include an additional current\_user\_retweet node, containing the ID of the source status for the retweet.
- include\_entities The entities node will not be included when set to false. Defaults to true.
- include\_ext\_alt\_text If alt text has been added to any attached media entities, this parameter will return an ext\_alt\_text value in the top-level key for the media entity.

9.2. Status methods 27

• include\_card\_uri - A boolean indicating if the retrieved Tweet should include a card\_uri attribute when there is an ads card attached to the Tweet and when that card was attached using the card\_uri value.

#### Return type Status object

```
API.update_status (status[, in_reply_to_status_id][, auto_populate_reply_metadata][, exclude_reply_user_ids][, attachment_url][, media_ids][, possibly_sensitive][, lat ][, long][, place_id][, display_coordinates][, trim_user][, enable_dmcommands][, fail_dmcommands][, card_uri])
```

Updates the authenticating user's current status, also known as Tweeting.

For each update attempt, the update text is compared with the authenticating user's recent Tweets. Any attempt that would result in duplication will be blocked, resulting in a 403 error. A user cannot submit the same status twice in a row.

While not rate limited by the API, a user is limited in the number of Tweets they can create at a time. If the number of updates posted by the user reaches the current allowed limit this method will return an HTTP 403 error.

#### **Parameters**

- **status** The text of your status update.
- in\_reply\_to\_status\_id The ID of an existing status that the update is in reply to. Note: This parameter will be ignored unless the author of the Tweet this parameter references is mentioned within the status text. Therefore, you must include @username, where username is the author of the referenced Tweet, within the update.
- auto\_populate\_reply\_metadata If set to true and used with in\_reply\_to\_status\_id, leading @mentions will be looked up from the original Tweet, and added to the new Tweet from there. This wil append @mentions into the metadata of an extended Tweet as a reply chain grows, until the limit on @mentions is reached. In cases where the original Tweet has been deleted, the reply will fail.
- **exclude\_reply\_user\_ids** When used with auto\_populate\_reply\_metadata, a comma-separated list of user ids which will be removed from the server-generated @mentions prefix on an extended Tweet. Note that the leading @mention cannot be removed as it would break the in-reply-to-status-id semantics. Attempting to remove it will be silently ignored.
- attachment\_url In order for a URL to not be counted in the status body of an extended Tweet, provide a URL as a Tweet attachment. This URL must be a Tweet permalink, or Direct Message deep link. Arbitrary, non-Twitter URLs must remain in the status text. URLs passed to the attachment\_url parameter not matching either a Tweet permalink or Direct Message deep link will fail at Tweet creation and cause an exception.
- media\_ids A list of media\_ids to associate with the Tweet. You may include up to 4 photos or 1 animated GIF or 1 video in a Tweet.
- **possibly\_sensitive** If you upload Tweet media that might be considered sensitive content such as nudity, or medical procedures, you must set this value to true.
- lat The latitude of the location this Tweet refers to. This parameter will be ignored unless it is inside the range -90.0 to +90.0 (North is positive) inclusive. It will also be ignored if there is no corresponding long parameter.
- **long** The longitude of the location this Tweet refers to. The valid ranges for longitude are -180.0 to +180.0 (East is positive) inclusive. This parameter will be ignored if outside that range, if it is not a number, if geo\_enabled is disabled, or if there no corresponding lat parameter.

- place\_id A place in the world.
- display\_coordinates Whether or not to put a pin on the exact coordinates a Tweet has been sent from.
- **trim\_user** A boolean indicating if user IDs should be provided, instead of complete user objects. Defaults to False.
- enable\_dmcommands When set to true, enables shortcode commands for sending Direct Messages as part of the status text to send a Direct Message to a user. When set to false, disables this behavior and includes any leading characters in the status text that is posted
- **fail\_dmcommands** When set to true, causes any status text that starts with shortcode commands to return an API error. When set to false, allows shortcode commands to be sent in the status text and acted on by the API.
- card\_uri Associate an ads card with the Tweet using the card\_uri value from any ads card response.

Return type Status object

API.update\_with\_media (filename[, status][, in\_reply\_to\_status\_id][, auto\_populate\_reply\_metadata][, lat][, long][, source][, place\_id][, file])

Deprecated: Use API.media\_upload() instead. Update the authenticated user's status. Statuses that are duplicates or too long will be silently ignored.

#### **Parameters**

- **filename** The filename of the image to upload. This will automatically be opened unless *file* is specified
- **status** The text of your status update.
- in\_reply\_to\_status\_id The ID of an existing status that the update is in reply to.
- auto\_populate\_reply\_metadata Whether to automatically include the @mentions in the status metadata.
- lat The location's latitude that this tweet refers to.
- long The location's longitude that this tweet refers to.
- source Source of the update. Only supported by Identi.ca. Twitter ignores this parameter.
- place\_id Twitter ID of location which is listed in the Tweet if geolocation is enabled for the user.
- **file** A file object, which will be used instead of opening *filename*. *filename* is still required, for MIME type detection and to use as a form field in the POST data

Return type Status object

#### API.destroy\_status(id)

Destroy the status specified by the id parameter. The authenticated user must be the author of the status to destroy.

**Parameters** id – The numerical ID of the status.

Return type Status object

#### API.retweet (id)

Retweets a tweet. Requires the id of the tweet you are retweeting.

**Parameters** id – The numerical ID of the status.

9.2. Status methods 29

Return type Status object

#### API.retweeters ( $id[, cursor][, stringify_ids]$ )

Returns up to 100 user IDs belonging to users who have retweeted the Tweet specified by the id parameter.

#### **Parameters**

- id The numerical ID of the status.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.
- **stringify\_ids** Have ids returned as strings instead.

**Return type** list of Integers

#### API.retweets (id[, count])

Returns up to 100 of the first retweets of the given tweet.

#### **Parameters**

- id The numerical ID of the status.
- **count** Specifies the number of retweets to retrieve.

Return type list of Status objects

#### API.unretweet (id)

Untweets a retweeted status. Requires the id of the retweet to unretweet.

**Parameters** id – The numerical ID of the status.

Return type Status object

## 9.3 User methods

#### API.get\_user(id/user\_id/screen\_name)

Returns information about the specified user.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- **screen\_name** Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.

Return type User object

API.me()

Returns the authenticated user's information.

Return type User object

API. friends ([id/user\_id/screen\_name][, cursor][, skip\_status][, include\_user\_entities])

Returns an user's friends ordered in which they were added 100 at a time. If no user is specified it defaults to the authenticated user.

#### **Parameters**

• id – Specifies the ID or screen name of the user.

- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.
- **count** The number of results to try and retrieve per page.
- **skip\_status** A boolean indicating whether statuses will not be included in the returned user objects. Defaults to false.
- include\_user\_entities The user object entities node will not be included when set to false. Defaults to true.

#### Return type list of User objects

## API.followers ( $[id/screen\_name/user\_id][, cursor]$ )

Returns a user's followers ordered in which they were added. If no user is specified by id/screen name, it defaults to the authenticated user.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.
- **count** The number of results to try and retrieve per page.
- **skip\_status** A boolean indicating whether statuses will not be included in the returned user objects. Defaults to false.
- include\_user\_entities The user object entities node will not be included when set to false. Defaults to true.

#### Return type list of User objects

API.lookup\_users ([user\_ids][, screen\_names][, include\_entities][, tweet\_mode])
Returns fully-hydrated user objects for up to 100 users per request.

There are a few things to note when using this method.

- You must be following a protected user to be able to see their most recent status update. If you don't follow a protected user their status will be removed.
- The order of user IDs or screen names may not match the order of users in the returned array.
- If a requested user is unknown, suspended, or deleted, then that user will not be returned in the results list.
- If none of your lookup criteria can be satisfied by returning a user object, a HTTP 404 will be thrown.

#### **Parameters**

• user ids – A list of user IDs, up to 100 are allowed in a single request.

9.3. User methods 31

- screen\_names A list of screen names, up to 100 are allowed in a single request.
- include\_entities The entities node will not be included when set to false. Defaults to true.
- **tweet\_mode** Valid request values are compat and extended, which give compatibility mode and extended mode, respectively for Tweets that contain over 140 characters.

Return type list of User objects

### API.search\_users (q[, count][, page])

Run a search for users similar to Find People button on Twitter.com; the same results returned by people search on Twitter.com will be returned by using this API (about being listed in the People Search). It is only possible to retrieve the first 1000 matches from this API.

#### **Parameters**

- **q** The query to run against people search.
- count Specifies the number of statuses to retrieve. May not be greater than 20.
- page Specifies the page of results to retrieve. Note: there are pagination limits.

Return type list of User objects

## 9.4 Direct Message Methods

## $\texttt{API.get\_direct\_message} ( [id] [, full\_text])$

Returns a specific direct message.

#### **Parameters**

- id The id of the Direct Message event that should be returned.
- **full\_text** A boolean indicating whether or not the full text of a message should be returned. If False the message text returned will be truncated to 140 chars. Defaults to False.

Return type DirectMessage object

## $\texttt{API.list\_direct\_messages} ( \big[ \textit{count} \, \big] \big[, \textit{cursor} \, \big])$

Returns all Direct Message events (both sent and received) within the last 30 days. Sorted in reverse-chronological order.

#### **Parameters**

- **count** The number of results to try and retrieve per page.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.

Return type list of DirectMessage objects

Sends a new direct message to the specified user from the authenticating user.

#### **Parameters**

- recipient\_id The ID of the user who should receive the direct message.
- text The text of your Direct Message. Max length of 10,000 characters.

- quick\_reply\_type The Quick Reply type to present to the user:
  - options Array of Options objects (20 max).
  - text\_input Text Input object.
  - location Location object.
- attachment\_type The attachment type. Can be media or location.
- attachment\_media\_id A media id to associate with the message. A Direct Message may only reference a single media\_id.

Return type DirectMessage object

#### API.destroy\_direct\_message(id)

Deletes the direct message specified in the required ID parameter. The authenticating user must be the recipient of the specified direct message. Direct Messages are only removed from the interface of the user context provided. Other members of the conversation can still access the Direct Messages.

**Parameters** id – The id of the Direct Message that should be deleted.

Return type None

## 9.5 Friendship Methods

API.create\_friendship(id/screen\_name/user\_id[,follow])

Create a new friendship with the specified user (aka follow).

#### **Parameters**

- id Specifies the ID or screen name of the user.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- **follow** Enable notifications for the target user in addition to becoming friends.

Return type User object

#### API.destroy\_friendship(id/screen\_name/user\_id)

Destroy a friendship with the specified user (aka unfollow).

## **Parameters**

- id Specifies the ID or screen name of the user.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.

Return type User object

API. **show\_friendship** (source\_id/source\_screen\_name, target\_id/target\_screen\_name)
Returns detailed information about the relationship between two users.

#### **Parameters**

• source\_id - The user\_id of the subject user.

- **source\_screen\_name** The screen\_name of the subject user.
- target\_id The user\_id of the target user.
- target\_screen\_name The screen\_name of the target user.

Return type Friendship object

#### API.lookup\_friendships (user\_ids/screen\_names)

Returns the relationships of the authenticated user to the list of up to 100 screen\_names or user\_ids provided.

#### **Parameters**

- user\_ids A list of user IDs, up to 100 are allowed in a single request.
- screen\_names A list of screen names, up to 100 are allowed in a single request.

Return type Relationship object

### API.friends\_ids (id/screen\_name/user\_id |, cursor |)

Returns an array containing the IDs of users being followed by the specified user.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.

**Return type** list of Integers

#### API.followers\_ids (id/screen\_name/user\_id)

Returns an array containing the IDs of users following the specified user.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.

Return type list of Integers

## 9.6 Account Methods

API.verify\_credentials([include\_entities][, skip\_status][, include\_email]) Verify the supplied user credentials are valid.

#### **Parameters**

- include\_entities The entities node will not be included when set to false. Defaults
  to true.
- **skip\_status** A boolean indicating whether statuses will not be included in the returned user objects. Defaults to false.
- include\_email When set to true email will be returned in the user objects as a string.

Return type User object if credentials are valid, otherwise False

#### API.rate\_limit\_status()

Returns the current rate limits for methods belonging to the specified resource families. When using application-only auth, this method's response indicates the application-only auth rate limiting context.

**Parameters resources** – A comma-separated list of resource families you want to know the current rate limit disposition for.

Return type JSON object

#### API.update\_profile\_image(filename)

Update the authenticating user's profile image. Valid formats: GIF, JPG, or PNG

**Parameters** filename – local path to image file to upload. Not a remote URL!

Return type User object

#### API.update\_profile\_background\_image(filename)

Update authenticating user's background image. Valid formats: GIF, JPG, or PNG

Parameters filename – local path to image file to upload. Not a remote URL!

Return type User object

## API.update\_profile([name][, url][, location][, description])

Sets values that users are able to set under the "Account" tab of their settings page.

#### **Parameters**

- name Maximum of 20 characters
- url Maximum of 100 characters. Will be prepended with "http://" if not present
- location Maximum of 30 characters
- description Maximum of 160 characters

Return type User object

## 9.7 Favorite Methods

## API.favorites([id][,page])

Returns the favorite statuses for the authenticating user or user specified by the ID parameter.

#### **Parameters**

- id The ID or screen name of the user to request favorites
- page Specifies the page of results to retrieve. Note: there are pagination limits.

Return type list of Status objects

#### API.create\_favorite(id)

Favorites the status specified in the ID parameter as the authenticating user.

9.7. Favorite Methods 35

**Parameters** id – The numerical ID of the status.

Return type Status object

### API.destroy\_favorite(id)

Un-favorites the status specified in the ID parameter as the authenticating user.

**Parameters** id – The numerical ID of the status.

Return type Status object

### 9.8 Block Methods

#### API.create\_block(id/screen\_name/user\_id)

Blocks the user specified in the ID parameter as the authenticating user. Destroys a friendship to the blocked user if it exists.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.

Return type User object

#### API.destroy\_block(id/screen\_name/user\_id)

Un-blocks the user specified in the ID parameter for the authenticating user.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- **screen\_name** Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.

Return type User object

#### API.blocks(|page|)

Returns an array of user objects that the authenticating user is blocking.

**Parameters** page – Specifies the page of results to retrieve. Note: there are pagination limits.

Return type list of User objects

#### API.blocks\_ids([cursor])

Returns an array of numeric user ids the authenticating user is blocking.

**Parameters** cursor – Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.

Return type list of Integers

## 9.9 Mute Methods

#### API.create\_mute(id/screen\_name/user\_id)

Mutes the user specified in the ID parameter for the authenticating user.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.

Return type User object

#### API.destroy\_mute(id/screen\_name/user\_id)

Un-mutes the user specified in the ID parameter for the authenticating user.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- **screen\_name** Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.

Return type User object

```
API.mutes([cursor]], include_entities][, skip_status])
```

Returns an array of user objects the authenticating user has muted.

#### **Parameters**

- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.
- include\_entities The entities node will not be included when set to false. Defaults to true.
- **skip\_status** A boolean indicating whether statuses will not be included in the returned user objects. Defaults to false.

Return type list of User objects

```
API.mutes_ids([cursor])
```

Returns an array of numeric user ids the authenticating user has muted.

**Parameters** cursor – Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.

**Return type** list of Integers

9.9. Mute Methods 37

## 9.10 Spam Reporting Methods

## API.report\_spam(id/screen\_name/user\_id|, perform\_block|)

The user specified in the id is blocked by the authenticated user and reported as a spammer.

#### **Parameters**

- id Specifies the ID or screen name of the user.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- perform\_block A boolean indicating if the reported account should be blocked. Defaults to True.

Return type User object

## 9.11 Saved Searches Methods

#### API.saved searches()

Returns the authenticated user's saved search queries.

Return type list of SavedSearch objects

#### API.get\_saved\_search(id)

Retrieve the data for a saved search owned by the authenticating user specified by the given id.

**Parameters** id – The id of the saved search to be retrieved.

Return type SavedSearch object

#### API.create\_saved\_search(query)

Creates a saved search for the authenticated user.

**Parameters query** – The query of the search the user would like to save.

Return type SavedSearch object

#### API.destroy saved search (id)

Destroys a saved search for the authenticated user. The search specified by id must be owned by the authenticating user.

**Parameters** id – The id of the saved search to be deleted.

Return type SavedSearch object

## 9.12 Search Methods

## API. search $(q[, geocode][, lang][, locale][, result_type][, count][, until][, since_id][, max_id][, include_entities])$

Returns a collection of relevant Tweets matching a specified query.

Please note that Twitter's search service and, by extension, the Search API is not meant to be an exhaustive source of Tweets. Not all Tweets will be indexed or made available via the search interface.

In API v1.1, the response format of the Search API has been improved to return Tweet objects more similar to the objects you'll find across the REST API and platform. However, perspectival attributes (fields that pertain to the perspective of the authenticating user) are not currently supported on this endpoint.<sup>12</sup>

#### **Parameters**

- **q** the search query string of 500 characters maximum, including operators. Queries may additionally be limited by complexity.
- **geocode** Returns tweets by users located within a given radius of the given latitude/longitude. The location is preferentially taking from the Geotagging API, but will fall back to their Twitter profile. The parameter value is specified by "latitide,longitude,radius", where radius units must be specified as either "mi" (miles) or "km" (kilometers). Note that you cannot use the near operator via the API to geocode arbitrary locations; however you can use this geocode parameter to search near geocodes directly. A maximum of 1,000 distinct "sub-regions" will be considered when using the radius modifier.
- lang Restricts tweets to the given language, given by an ISO 639-1 code. Language detection is best-effort.
- **locale** Specify the language of the query you are sending (only ja is currently effective). This is intended for language-specific consumers and the default should work in the majority of cases.
- result\_type Specifies what type of search results you would prefer to receive. The current default is "mixed." Valid values include:
  - mixed: include both popular and real time results in the response
  - recent : return only the most recent results in the response
  - popular : return only the most popular results in the response
- **count** The number of results to try and retrieve per page.
- until Returns tweets created before the given date. Date should be formatted as YYYY-MM-DD. Keep in mind that the search index has a 7-day limit. In other words, no tweets will be found for a date older than one week.
- **since\_id** Returns only statuses with an ID greater than (that is, more recent than) the specified ID. There are limits to the number of Tweets which can be accessed through the API. If the limit of Tweets has occurred since the since\_id, the since\_id will be forced to the oldest ID available.
- max\_id Returns only statuses with an ID less than (that is, older than) or equal to the specified ID.
- include\_entities The entities node will not be included when set to false. Defaults to true.

Return type SearchResults object

API. search\_30\_day (environment\_name, query[, tag][, fromDate][, toDate][, maxResults][, next])
Premium search that provides Tweets posted within the last 30 days.

#### **Parameters**

• **environment\_name** – The (case-sensitive) label associated with your search developer environment, as displayed at https://developer.twitter.com/en/account/environments.

9.12. Search Methods 39

 $<sup>^{1}\</sup> https://web.archive.org/web/20170829051949/https://dev.twitter.com/rest/reference/get/search/tweets$ 

<sup>&</sup>lt;sup>2</sup> https://twittercommunity.com/t/favorited-reports-as-false-even-if-status-is-already-favorited-by-the-user/11145

- query The equivalent of one premium rule/filter, with up to 1,024 characters (256 with Sandbox dev environments). This parameter should include ALL portions of the rule/filter, including all operators, and portions of the rule should not be separated into other parameters of the query.
- tag Tags can be used to segregate rules and their matching data into different logical groups. If a rule tag is provided, the rule tag is included in the 'matching\_rules' attribute. It is recommended to assign rule-specific UUIDs to rule tags and maintain desired mappings on the client side.
- fromDate The oldest UTC timestamp (from most recent 30 days) from which the Tweets will be provided. Timestamp is in minute granularity and is inclusive (i.e. 12:00 includes the 00 minute). Specified: Using only the fromDate with no toDate parameter will deliver results for the query going back in time from now() until the fromDate. Not Specified: If a fromDate is not specified, the API will deliver all of the results for 30 days prior to now() or the toDate (if specified). If neither the fromDate or toDate parameter is used, the API will deliver all results for the most recent 30 days, starting at the time of the request, going backwards.
- toDate The latest, most recent UTC timestamp to which the Tweets will be provided. Timestamp is in minute granularity and is not inclusive (i.e. 11:59 does not include the 59th minute of the hour). Specified: Using only the toDate with no fromDate parameter will deliver the most recent 30 days of data prior to the toDate. Not Specified: If a toDate is not specified, the API will deliver all of the results from now() for the query going back in time to the fromDate. If neither the fromDate or toDate parameter is used, the API will deliver all results for the entire 30-day index, starting at the time of the request, going backwards.
- maxResults The maximum number of search results to be returned by a request. A number between 10 and the system limit (currently 500, 100 for Sandbox environments). By default, a request response will return 100 results.
- next This parameter is used to get the next 'page' of results. The value used with the
  parameter is pulled directly from the response provided by the API, and should not be modified.

API.search\_full\_archive(environment\_name, query[, tag][, fromDate][, toDate][, maxResults][, next])

Premium search that provides Tweets from as early as 2006, starting with the first Tweet posted in March 2006.

### **Parameters**

- **environment\_name** The (case-sensitive) label associated with your search developer environment, as displayed at https://developer.twitter.com/en/account/environments.
- query The equivalent of one premium rule/filter, with up to 1,024 characters (256 with Sandbox dev environments). This parameter should include ALL portions of the rule/filter, including all operators, and portions of the rule should not be separated into other parameters of the query.
- tag Tags can be used to segregate rules and their matching data into different logical groups. If a rule tag is provided, the rule tag is included in the 'matching\_rules' attribute. It is recommended to assign rule-specific UUIDs to rule tags and maintain desired mappings on the client side.
- fromDate The oldest UTC timestamp (from most recent 30 days) from which the Tweets will be provided. Timestamp is in minute granularity and is inclusive (i.e. 12:00 includes the 00 minute). Specified: Using only the fromDate with no toDate parameter will deliver results for the query going back in time from now() until the fromDate. Not Specified: If a fromDate is not specified, the API will deliver all of the results for 30 days prior to now() or the toDate (if specified). If neither the fromDate or toDate parameter is used, the API

will deliver all results for the most recent 30 days, starting at the time of the request, going backwards.

- toDate The latest, most recent UTC timestamp to which the Tweets will be provided. Timestamp is in minute granularity and is not inclusive (i.e. 11:59 does not include the 59th minute of the hour). Specified: Using only the toDate with no fromDate parameter will deliver the most recent 30 days of data prior to the toDate. Not Specified: If a toDate is not specified, the API will deliver all of the results from now() for the query going back in time to the fromDate. If neither the fromDate or toDate parameter is used, the API will deliver all results for the entire 30-day index, starting at the time of the request, going backwards.
- maxResults The maximum number of search results to be returned by a request. A number between 10 and the system limit (currently 500, 100 for Sandbox environments). By default, a request response will return 100 results.
- next This parameter is used to get the next 'page' of results. The value used with the
  parameter is pulled directly from the response provided by the API, and should not be modified

## 9.13 List Methods

API.create\_list(name[, mode][, description])

Creates a new list for the authenticated user. Note that you can create up to 1000 lists per account.

#### **Parameters**

- name The name of the new list.
- mode Whether your list is public or private. Values can be public or private. Lists are public by default if no mode is specified.
- **description** The description of the list you are creating.

Return type List object

API.destroy\_list([owner\_screen\_name/owner\_id], list\_id/slug)

Deletes the specified list. The authenticated user must own the list to be able to destroy it.

#### **Parameters**

- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- list\_id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.

Return type List object

API.update\_list (list\_id/slug[, name][, mode][, description][, owner\_screen\_name/owner\_id])
Updates the specified list. The authenticated user must own the list to be able to update it.

#### **Parameters**

• list\_id - The numerical id of the list.

9.13. List Methods 41

- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- name The name for the list.
- mode Whether your list is public or private. Values can be public or private. Lists are public by default if no mode is specified.
- **description** The description to give the list.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.
- owner\_id The user ID of the user who owns the list being requested by a slug.

#### Return type List object

## API.lists\_all([screen\_name][, user\_id][, reverse])

Returns all lists the authenticating or specified user subscribes to, including their own. The user is specified using the user\_id or screen\_name parameters. If no user is given, the authenticating user is used.

A maximum of 100 results will be returned by this call. Subscribed lists are returned first, followed by owned lists. This means that if a user subscribes to 90 lists and owns 20 lists, this method returns 90 subscriptions and 10 owned lists. The reverse method returns owned lists first, so with reverse=true, 20 owned lists and 80 subscriptions would be returned.

#### **Parameters**

- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- reverse A boolean indicating if you would like owned lists to be returned first. See description above for information on how this parameter works.

#### Return type list of List objects

API.lists\_memberships ([screen\_name][, user\_id][, filter\_to\_owned\_lists][, cursor][, count])

Returns the lists the specified user has been added to. If user\_id or screen\_name are not provided, the memberships for the authenticating user are returned.

#### **Parameters**

- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- **filter\_to\_owned\_lists** A boolean indicating whether to return just lists the authenticating user owns, and the user represented by user\_id or screen\_name is a member of.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.
- **count** The number of results to try and retrieve per page.

Return type list of List objects

## API.lists\_subscriptions([screen\_name][, user\_id][, cursor][, count])

Obtain a collection of the lists the specified user is subscribed to, 20 lists per page by default. Does not include the user's own lists.

#### **Parameters**

- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.
- **count** The number of results to try and retrieve per page.

#### Return type list of List objects

API.list\_timeline(list\_id/slug[, owner\_id/owner\_screen\_name][, since\_id][, max\_id][, count][, include\_entities][, include\_rts])

Returns a timeline of tweets authored by members of the specified list. Retweets are included by default. Use the include\_rts=false parameter to omit retweets.

#### **Parameters**

- list\_id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.
- **since\_id** Returns only statuses with an ID greater than (that is, more recent than) the specified ID.
- max\_id Returns only statuses with an ID less than (that is, older than) or equal to the specified ID.
- **count** The number of results to try and retrieve per page.
- include\_entities The entities node will not be included when set to false. Defaults to true.
- include\_rts A boolean indicating whether the list timeline will contain native retweets (if they exist) in addition to the standard stream of tweets. The output format of retweeted tweets is identical to the representation you see in home\_timeline.

#### Return type list of Status objects

API.get\_list(list\_id/slug[, owner\_id/owner\_screen\_name])

Returns the specified list. Private lists will only be shown if the authenticated user owns the specified list.

#### **Parameters**

- list id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.

9.13. List Methods 43

- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

Return type List object

API.add\_list\_member(list\_id/slug, screen\_name/user\_id[, owner\_id/owner\_screen\_name])

Add a member to a list. The authenticated user must own the list to be able to add members to it. Lists are limited to 5,000 members.

#### **Parameters**

- list id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when
  a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

Return type List object

 $\texttt{API.add\_list\_members} \ (\textit{list\_id/slug}, \textit{screen\_name/user\_id} \big[, \textit{owner\_id/owner\_screen\_name} \, \big])$ 

Add up to 100 members to a list. The authenticated user must own the list to be able to add members to it. Lists are limited to 5,000 members.

#### **Parameters**

- list\_id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- screen\_name A comma separated list of screen names, up to 100 are allowed in a single request
- user\_id A comma separated list of user IDs, up to 100 are allowed in a single request
- owner id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

Return type List object

API.remove\_list\_member(list\_id/slug, screen\_name/user\_id[, owner\_id/owner\_screen\_name])

Removes the specified member from the list. The authenticated user must be the list's owner to remove members from the list.

#### **Parameters**

• list\_id - The numerical id of the list.

- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

#### Return type List object

API.remove\_list\_members (list\_id/slug, screen\_name/user\_id[, owner\_id/owner\_screen\_name])
Remove up to 100 members from a list. The authenticated user must own the list to be able to remove members from it. Lists are limited to 5,000 members.

#### **Parameters**

- **list\_id** The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- screen\_name A comma separated list of screen names, up to 100 are allowed in a single request
- user\_id A comma separated list of user IDs, up to 100 are allowed in a single request
- owner\_id The user ID of the user who owns the list being requested by a slug.
- **owner\_screen\_name** The screen name of the user who owns the list being requested by a slug.

#### Return type List object

API.list\_members (list\_id/slug[, owner\_id/owner\_screen\_name][, cursor]) Returns the members of the specified list.

#### **Parameters**

- list\_id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.

#### Return type list of User objects

API. **show\_list\_member** (*list\_id/slug*, *screen\_name/user\_id*[, *owner\_id/owner\_screen\_name*]) Check if the specified user is a member of the specified list.

9.13. List Methods 45

#### **Parameters**

- list id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- screen\_name Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

Return type User object if user is a member of list

API. **subscribe\_list** (*list\_id/slug*[, *owner\_id/owner\_screen\_name*])
Subscribes the authenticated user to the specified list.

#### **Parameters**

- list id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

Return type List object

API. unsubscribe\_list (list\_id/slug[, owner\_id/owner\_screen\_name])
Unsubscribes the authenticated user from the specified list.

#### **Parameters**

- list id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- owner id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

Return type List object

API.list\_subscribers (list\_id/slug[, owner\_id/owner\_screen\_name][, cursor][, count][, include\_entities][, skip\_status])

Returns the subscribers of the specified list. Private list subscribers will only be shown if the authenticated user owns the specified list.

#### **Parameters**

• list\_id - The numerical id of the list.

- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.
- **cursor** Breaks the results into pages. Provide a value of -1 to begin paging. Provide values as returned to in the response body's next\_cursor and previous\_cursor attributes to page back and forth in the list.
- **count** The number of results to try and retrieve per page.
- include\_entities The entities node will not be included when set to false. Defaults to true.
- **skip\_status** A boolean indicating whether statuses will not be included in the returned user objects. Defaults to false.

Return type list of User objects

API.**show\_list\_subscriber** (*list\_id/slug*, *screen\_name/user\_id*[, *owner\_id/owner\_screen\_name*]) Check if the specified user is a subscriber of the specified list.

#### **Parameters**

- list id The numerical id of the list.
- **slug** You can identify a list by its slug instead of its numerical id. If you decide to do so, note that you'll also have to specify the list owner using the owner\_id or owner\_screen\_name parameters.
- **screen\_name** Specifies the screen name of the user. Helpful for disambiguating when a valid screen name is also a user ID.
- user\_id Specifies the ID of the user. Helpful for disambiguating when a valid user ID is also a valid screen name.
- owner\_id The user ID of the user who owns the list being requested by a slug.
- owner\_screen\_name The screen name of the user who owns the list being requested by a slug.

Return type User object if user is subscribed to list

## 9.14 Trends Methods

## API.trends\_available()

Returns the locations that Twitter has trending topic information for. The response is an array of "locations" that encode the location's WOEID (a Yahoo! Where On Earth ID) and some other human-readable information such as a canonical name and country the location belongs in.

Return type JSON object

## API.trends\_place(id[, exclude])

Returns the top 50 trending topics for a specific WOEID, if trending information is available for it.

The response is an array of "trend" objects that encode the name of the trending topic, the query parameter that can be used to search for the topic on Twitter Search, and the Twitter Search URL.

9.14. Trends Methods 47

This information is cached for 5 minutes. Requesting more frequently than that will not return any more data, and will count against your rate limit usage.

The tweet\_volume for the last 24 hours is also returned for many trends if this is available.

#### **Parameters**

- id The Yahoo! Where On Earth ID of the location to return trending information for. Global information is available by using 1 as the WOEID.
- exclude Setting this equal to hashtags will remove all hashtags from the trends list.

Return type JSON object

#### API.trends\_closest(lat, long)

Returns the locations that Twitter has trending topic information for, closest to a specified location.

The response is an array of "locations" that encode the location's WOEID and some other human-readable information such as a canonical name and country the location belongs in.

A WOEID is a Yahoo! Where On Earth ID.

#### **Parameters**

- lat If provided with a long parameter the available trend locations will be sorted by distance, nearest to furthest, to the co-ordinate pair. The valid ranges for longitude is -180.0 to +180.0 (West is negative, East is positive) inclusive.
- long If provided with a lat parameter the available trend locations will be sorted by distance, nearest to furthest, to the co-ordinate pair. The valid ranges for longitude is -180.0 to +180.0 (West is negative, East is positive) inclusive.

Return type JSON object

## 9.15 Geo Methods

## API.reverse\_geocode([lat][, long][, accuracy][, granularity][, max\_results])

Given a latitude and longitude, looks for places (cities and neighbourhoods) whose IDs can be specified in a call to <code>update\_status()</code> to appear as the name of the location. This call provides a detailed response about the location in question; the <code>nearby\_places()</code> function should be preferred for getting a list of places nearby without great detail.

#### **Parameters**

- lat The location's latitude.
- long The location's longitude.
- accuracy Specify the "region" in which to search, such as a number (then this is a radius in meters, but it can also take a string that is suffixed with ft to specify feet). If this is not passed in, then it is assumed to be 0m
- granularity Assumed to be neighborhood by default; can also be city.
- max\_results A hint as to the maximum number of results to return. This is only a guideline, which may not be adhered to.

#### API.geo\_id(id)

Given id of a place, provide more details about that place.

**Parameters** id – Valid Twitter ID of a location.

## 9.16 Utility methods

#### API.configuration()

Returns the current configuration used by Twitter including twitter.com slugs which are not usernames, maximum photo resolutions, and t.co shortened URL length. It is recommended applications request this endpoint when they are loaded, but no more than once a day.

## 9.17 Media methods

## API.media upload(filename[, file])

Use this endpoint to upload images to Twitter.

#### **Parameters**

- **filename** The filename of the image to upload. This will automatically be opened unless file is specified.
- **file** A file object, which will be used instead of opening filename. filename is still required, for MIME type detection and to use as a form field in the POST data.

Return type Media object

#### API.create\_media\_metadata(media\_id, alt\_text)

This endpoint can be used to provide additional information about the uploaded media\_id. This feature is currently only supported for images and GIFs. Call this endpoint to attach additional metadata such as image alt text.

#### **Parameters**

- media\_id The ID of the media to add alt text to.
- alt\_text The alt text to add to the image.

## CHAPTER 10

tweepy.error — Exceptions

The exceptions are available in the tweepy module directly, which means tweepy.error itself does not need to be imported. For example, tweepy.error.TweepError is available as tweepy.TweepError.

### exception TweepError

The main exception Tweepy uses. Is raised for a number of things.

When a TweepError is raised due to an error Twitter responded with, the error code (as described in the API documentation) can be accessed at TweepError.response.text. Note, however, that TweepErrors also may be raised with other things as message (for example plain error reason strings).

## exception RateLimitError

Is raised when an API method fails due to hitting Twitter's rate limit. Makes for easy handling of the rate limit specifically.

Inherits from TweepError, so except TweepError will catch a RateLimitError too.

## CHAPTER 11

## **Running Tests**

These steps outline how to run tests for Tweepy:

- 1. Download Tweepy's source code to a directory.
- 2. Install from the downloaded source with the test extra, e.g. pip install .[test]. Optionally install the dev extra as well, for tox and coverage, e.g. pip install .[dev,test].
- 3. Run python setup.py nosetests or simply nosetests in the source directory. With the dev extra, coverage will be shown, and tox can also be run to test different Python versions.

To record new cassettes, the following environment variables can be used:

TWITTER\_USERNAME CONSUMER\_KEY CONSUMER\_SECRET ACCESS\_KEY ACCESS\_SECRET USE\_REPLAY Simply set USE\_REPLAY to False and provide the app and account credentials and username.

# CHAPTER 12

## Indices and tables

- genindex
- search

## Index

A  add_list_member() (API method), 44  add_list_members() (API method), 44  API (built-in class), 25	<pre>get_list() (API method), 43 get_saved_search() (API method), 38 get_status() (API method), 27 get_user() (API method), 30</pre>
B blocks() (API method), 36	H home_timeline() (API method), 26
blocks_ids() (API method), 36	L
Configuration() (API method), 49 create_block() (API method), 36 create_favorite() (API method), 35 create_friendship() (API method), 33 create_list() (API method), 41 create_media_metadata() (API method), 49 create_mute() (API method), 37 create_saved_search() (API method), 38	list_direct_messages() (API method), 32 list_members() (API method), 45 list_subscribers() (API method), 46 list_timeline() (API method), 43 lists_all() (API method), 42 lists_memberships() (API method), 42 lists_subscriptions() (API method), 42 lookup_friendships() (API method), 34 lookup_users() (API method), 31
D	M
destroy_block() (API method), 36 destroy_direct_message() (API method), 33 destroy_favorite() (API method), 36 destroy_friendship() (API method), 33 destroy_list() (API method), 41	me() (API method), 30 media_upload() (API method), 49 mentions_timeline() (API method), 27 mutes() (API method), 37 mutes_ids() (API method), 37
destroy_mute() (API method), 37 destroy_saved_search() (API method), 38	R
destroy_saved_search() (API method), 38 destroy_status() (API method), 29	rate_limit_status()(API method),35 RateLimitError,51
F	<pre>remove_list_member() (API method), 44 remove_list_members() (API method), 45</pre>
favorites() (API method), 35 followers() (API method), 31 followers_ids() (API method), 34 friends() (API method), 30 friends_ids() (API method), 34	report_spam() (API method), 38 retweet() (API method), 29 retweeters() (API method), 30 retweets() (API method), 30 retweets_of_me() (API method), 27 reverse_geocode() (API method), 48
G	S
<pre>geo_id() (API method), 48 get_direct_message() (API method), 32</pre>	saved_searches() (API method), 38

```
search() (API method), 38
search_30_day()(API method), 39
search_full_archive() (API method), 40
search_users() (API method), 32
send_direct_message() (API method), 32
show_friendship() (API method), 33
show_list_member() (API method), 45
show_list_subscriber() (API method), 47
statuses_lookup()(API method), 26
subscribe_list()(API method), 46
trends_available()(API method), 47
trends_closest()(API method), 48
trends_place() (API method), 47
TweepError, 51
U
unretweet()(API method), 30
unsubscribe_list()(API method), 46
update_list()(API method),41
update_profile()(API method), 35
update_profile_background_image()
                                         (API
       method), 35
update_profile_image()(API method), 35
update_status()(API method), 28
update_with_media()(API method), 29
user_timeline() (API method), 26
V
verify_credentials()(API method), 34
```

58 Index