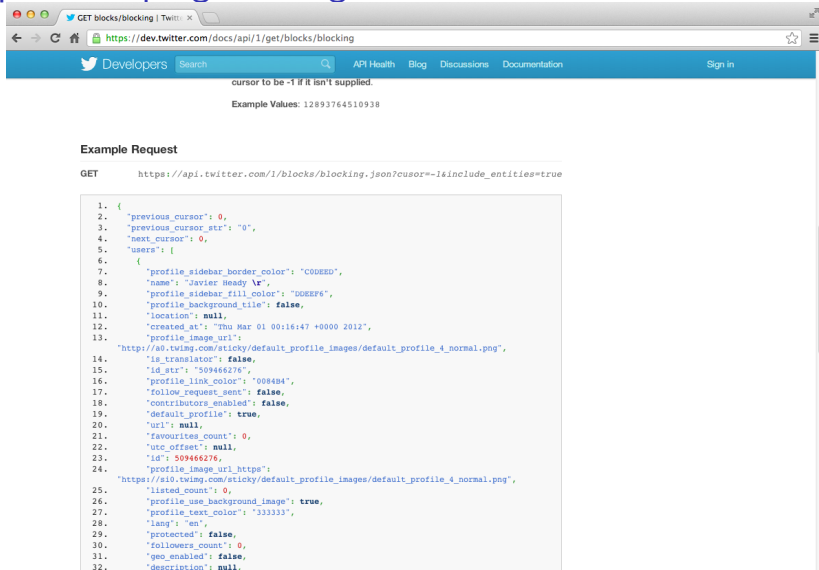


Reading data from APIs

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Application programming interfaces



The screenshot shows the Twitter API documentation page for the `GET /blocks/blocking` endpoint. The page header includes the Twitter logo, a search bar, and navigation links for API Health, Blog, Discussions, and Documentation. The main content area displays the endpoint details, including the method (GET), the full URL with a cursor parameter, and an example JSON response.

cursor to be -1 if it isn't supplied.

Example Values: 12893764510938

Example Request

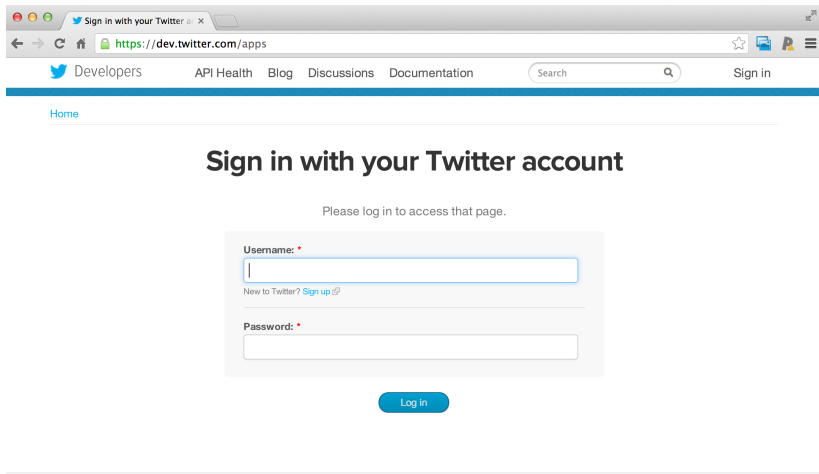
GET `https://api.twitter.com/1/blocks/blocking.json?cursor=-1&include_entities=true`

```
1. {
2.   "previous_cursor": 0,
3.   "previous_cursor_str": "0",
4.   "next_cursor": 0,
5.   "users": [
6.     {
7.       "profile_sidebar_border_color": "C0DEED",
8.       "name": "Javier Heady \r",
9.       "profile_sidebar_fill_color": "D0E0F6",
10.      "profile_background_tile": false,
11.      "location": null,
12.      "created_at": "Thu Mar 01 00:16:47 +0000 2012",
13.      "profile_image_url":
14.        "https://a0.twimg.com/sticky/default_profile_images/default_profile_4_normal.png",
15.      "is_translator": false,
16.      "id_str": "509466276",
17.      "profile_link_color": "0084B4",
18.      "follow_request_sent": false,
19.      "contributors_enabled": false,
20.      "default_profile": true,
21.      "url": null,
22.      "favourites_count": 0,
23.      "utc_offset": null,
24.      "id": "509466276",
25.      "profile_image_url_https":
26.        "https://s10.twimg.com/sticky/default_profile_images/default_profile_4_normal.png",
27.      "listed_count": 0,
28.      "profile_use_background_image": true,
29.      "profile_text_color": "333333",
30.      "lang": "en",
31.      "protected": false,
32.      "followers_count": 0,
33.      "geo_enabled": false,
34.      "description": null,
```

https:

`//dev.twitter.com/docs/api/1/get/blocks/blocking`

Creating an application



The screenshot shows a web browser window with the address bar displaying `https://dev.twitter.com/apps`. The page title is "Sign in with your Twitter account". The navigation bar includes links for "Developers", "API Health", "Blog", "Discussions", "Documentation", a search bar, and a "Sign in" button. A "Home" link is visible in the breadcrumb trail. The main content area features a large heading "Sign in with your Twitter account" and a subtext "Please log in to access that page." Below this is a login form with two input fields: "Username:" and "Password:". The "Username:" field has a red asterisk indicating a required field. Below the "Username:" field is a link "New to Twitter? Sign up". Below the "Password:" field is a "Log in" button.

Sign in with your Twitter account

Please log in to access that page.

Username: *

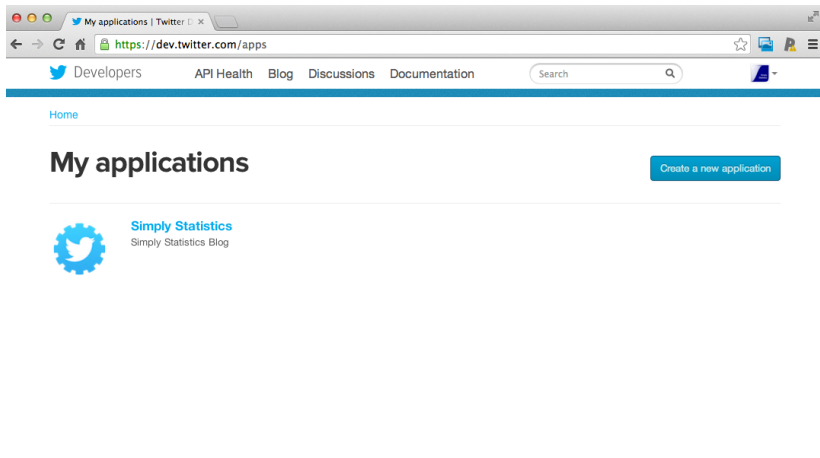
New to Twitter? [Sign up](#)

Password: *

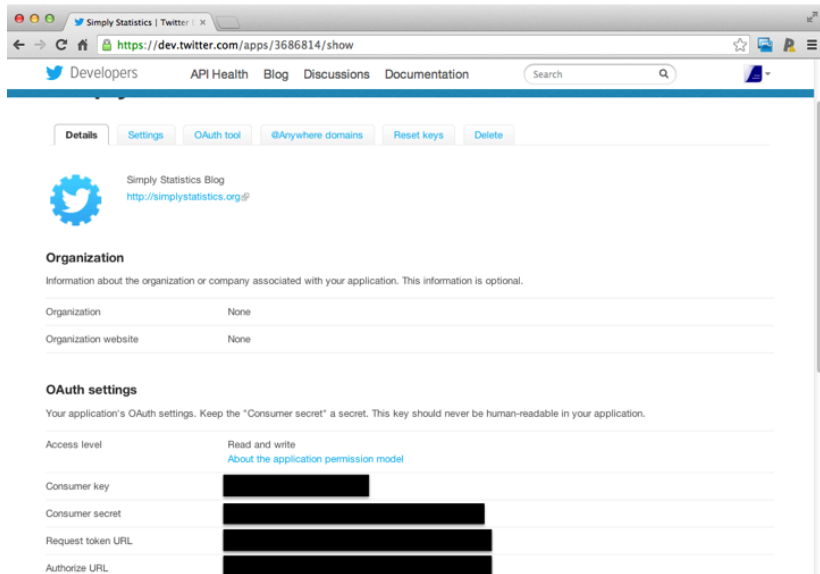
Log in

`https://dev.twitter.com/apps`

Creating an application



Creating an application




The screenshot shows a web browser window with the URL `https://dev.twitter.com/apps/3686814/show`. The page title is 'Simply Statistics | Twitter'. The browser's address bar and navigation buttons are visible. The page content includes a navigation bar with links for 'Developers', 'API Health', 'Blog', 'Discussions', and 'Documentation', along with a search bar. Below this is a tabbed interface with tabs for 'Details', 'Settings', 'OAuth tool', '@Anywhere domains', 'Reset keys', and 'Delete'. The 'Details' tab is active, showing the application's profile picture (a blue Twitter bird inside a gear), the name 'Simply Statistics Blog', and the website 'http://simplystatistics.org'. A section titled 'Organization' contains a description and two input fields for 'Organization' and 'Organization website', both set to 'None'. Another section titled 'OAuth settings' provides instructions on keeping the 'Consumer secret' secret and lists five fields: 'Access level' (set to 'Read and write'), 'Consumer key', 'Consumer secret', 'Request token URL', and 'Authorize URL'. The last three fields are redacted with black bars.

Simply Statistics | Twitter

<https://dev.twitter.com/apps/3686814/show>

Developers API Health Blog Discussions Documentation Search

Details Settings OAuth tool @Anywhere domains Reset keys Delete

 Simply Statistics Blog
<http://simplystatistics.org>

Organization

Information about the organization or company associated with your application. This information is optional.

Organization	None
Organization website	None

OAuth settings

Your application's OAuth settings. Keep the "Consumer secret" a secret. This key should never be human-readable in your application.

Access level	Read and write About the application permission model
Consumer key	[Redacted]
Consumer secret	[Redacted]
Request token URL	[Redacted]
Authorize URL	[Redacted]

Accessing Twitter from R

```
myapp = oauth_app("twitter",  
                  key="yourConsumerKeyHere",secret="yourConsumerSecretHere")  
sig = sign_oauth1.0(myapp,  
                    token = "yourTokenHere",  
                    token_secret = "yourTokenSecretHere")  
homeTL = GET("https://api.twitter.com/1.1/statuses/home_timeline.json")
```

Converting the json object

```
json1 = content(homeTL)
json2 = jsonlite::fromJSON(toJSON(json1))
json2[1,1:4]
```

		created_at	id	
1	Mon Jan 13 05:18:04 +0000 2014	4.225984e+17	4225983989406	
1	Now that P. Norvig's regex golf	IPython notebook hit	Slas	

How did I know what url to use?

The screenshot shows a web browser window with the URL `https://dev.twitter.com/docs/api/1.1/get/statuses/home_timeline`. The page title is "GET statuses/home_timeline". The navigation bar includes links for "Developers", "API Health", "Blog", "Discussions", and "Documentation". The main content area has a breadcrumb trail: "Home → Documentation → REST API". Below this, the title "GET statuses/home_timeline" is displayed. There are two tabs: "View" (selected) and "What links here". The page is updated on "Wed, 2012-09-05 10:06" and is for "API version 1.1". The description states: "Returns a collection of the most recent Tweets and retweets posted by the authenticating user and the users they follow. The home timeline is central to how most users interact with the Twitter service. Up to 800 Tweets are obtainable on the home timeline. It is more volatile for users that follow many users or follow users who tweet frequently. See Working with Timelines for instructions on traversing timelines efficiently." The "Resource URL" is `https://api.twitter.com/1.1/statuses/home_timeline.json`. The "Parameters" section lists two parameters: "count" (optional, Specifies the number of records to retrieve. Must be less than or equal to 200. Defaults to 20. Example Values: 5) and "since_id" (optional, Returns results 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). On the right, the "Resource Information" table lists: Rate Limited? (Yes), Requests per rate limit window (15/user), Authentication (Requires user context), Response Formats (json), HTTP Methods (GET), Resource family (statuses), Response Object (Tweets), and API Version (v1.1). Below this is the "OAuth tool" section.

GET statuses/home_timeline

Home → Documentation → REST API

GET statuses/home_timeline

[View](#) [What links here](#)

Updated on Wed, 2012-09-05 10:06 API version 1.1

Returns a collection of the most recent [Tweets](#) and retweets posted by the authenticating user and the users they follow. The home timeline is central to how most users interact with the Twitter service.

Up to 800 Tweets are obtainable on the home timeline. It is more volatile for users that follow many users or follow users who tweet frequently.

See [Working with Timelines](#) for instructions on traversing timelines efficiently.

Resource URL

`https://api.twitter.com/1.1/statuses/home_timeline.json`

Parameters

count optional	Specifies the number of records to retrieve. Must be less than or equal to 200. Defaults to 20. Example Values: 5
since_id optional	Returns results 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.

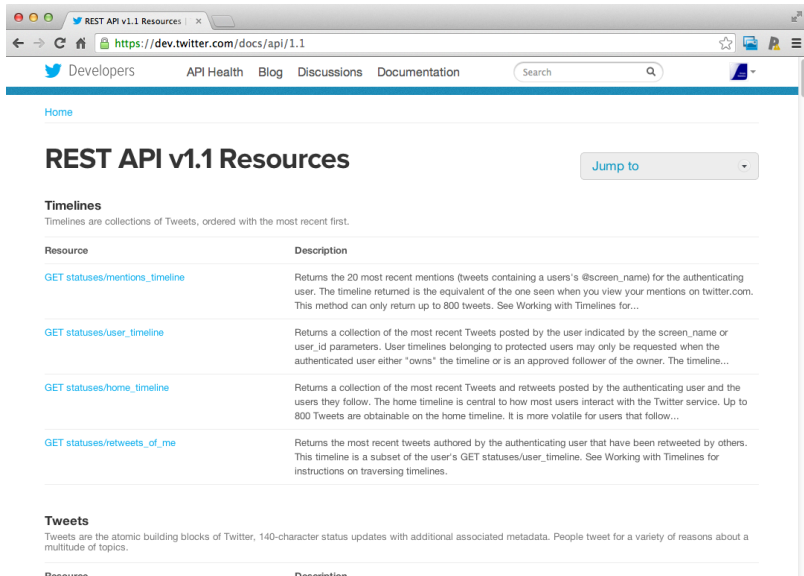
Resource Information

Rate Limited?	Yes
Requests per rate limit window	15/user
Authentication	Requires user context
Response Formats	json
HTTP Methods	GET
Resource family	statuses
Response Object	Tweets
API Version	v1.1

OAuth tool

https:
//dev.twitter.com/docs/api/1.1/get/search/tweets

In general look at the documentation



The screenshot shows a web browser window with the URL `https://dev.twitter.com/docs/api/1.1`. The page title is "REST API v1.1 Resources". The navigation bar includes links for "Developers", "API Health", "Blog", "Discussions", and "Documentation", along with a search bar. A "Home" link is visible in the main content area. The "REST API v1.1 Resources" section is highlighted, and a "Jump to" dropdown menu is present. Below this, the "Timelines" section is introduced, stating that timelines are collections of Tweets ordered by recency. A table follows, listing four resources: `GET statuses/mentions_timeline`, `GET statuses/user_timeline`, `GET statuses/home_timeline`, and `GET statuses/retweets_of_me`, each with a brief description of the data returned. The "Tweets" section is also visible at the bottom, defining tweets as 140-character status updates.

REST API v1.1 Resources

[Jump to](#)

Timelines

Timelines are collections of Tweets, ordered with the most recent first.

Resource	Description
GET statuses/mentions_timeline	Returns the 20 most recent mentions (tweets containing a user's @screen_name) for the authenticating user. The timeline returned is the equivalent of the one seen when you view your mentions on twitter.com. This method can only return up to 800 tweets. See Working with Timelines for...
GET statuses/user_timeline	Returns a collection of the most recent Tweets posted by the user indicated by the screen_name or user_id parameters. User timelines belonging to protected users may only be requested when the authenticated user either "owns" the timeline or is an approved follower of the owner. The timeline...
GET statuses/home_timeline	Returns a collection of the most recent Tweets and retweets posted by the authenticating user and the users they follow. The home timeline is central to how most users interact with the Twitter service. Up to 800 Tweets are obtainable on the home timeline. It is more volatile for users that follow...
GET statuses/retweets_of_me	Returns the most recent tweets authored by the authenticating user that have been retweeted by others. This timeline is a subset of the user's GET statuses/user_timeline. See Working with Timelines for instructions on traversing timelines.

Tweets

Tweets are the atomic building blocks of Twitter, 140-character status updates with additional associated metadata. People tweet for a variety of reasons about a multitude of topics.

Resource	Description
----------	-------------

`https://dev.twitter.com/docs/api/1.1/overview`

In general look at the documentation

- ▶ http allows GET, POST, PUT, DELETE requests if you are authorized
- ▶ You can authenticate with a user name or a password
- ▶ Most modern APIs use something like oauth
- ▶ http works well with Facebook, Google, Twitter, Github, etc.