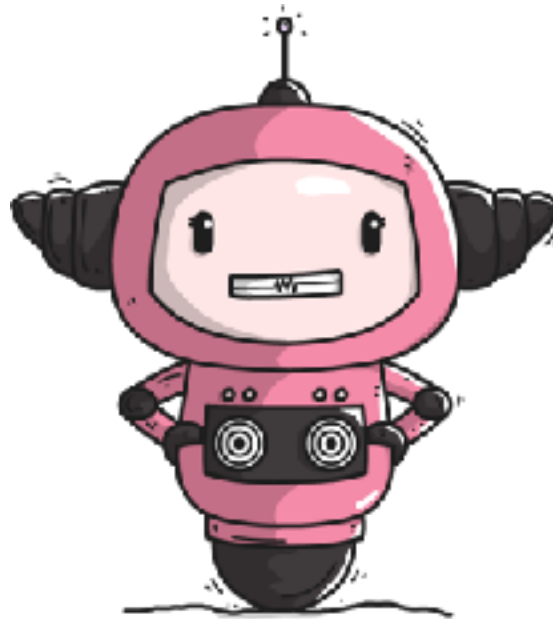


Sentiment Analysis with machinebox.io



Requirements

- Go
- Docker: <http://docker.com>
- Textbox Image: *[docker pull machinebox/textbox](#)*
- MachineBox API Key: <https://machinebox.io/login>
- Twitter API keys: <https://apps.twitter.com/>

STEP 1 - Get Twitter Credentials

<https://apps.twitter.com/>

 Application Management



Create an application

Application Details

Name *

Your application name. This is used to attribute the source of a tweet and in user-facing authorization screens. 32 characters max.

Description *

Your application description, which will be shown in user-facing authorization screens. Between 10 and 260 characters max.

Website *



Your application's publicly accessible home page, where users can go to download, make use of, or find out more information about your application. This fully-qualified URL is used in the source attribution for tweets created by your application and will be shown in user-facing authorization screens.

(If you don't have a URL yet, just put a placeholder here but remember to change it later.)

Callback URL

Where should we return after successfully authenticating? [OAuth 1.0a](#) applications should explicitly specify their `oauth_callback` URL on the request token step, regardless of the value given here. To restrict your application from using callbacks, leave this field blank.

Create access tokens

 Application Management 

Textbox-Nic

Test OAuth

[Details](#) [Settings](#) [Keys and Access Tokens](#) [Permissions](#)

Application Settings

Keep the "Consumer Secret" a secret. This key should never be human-readable in your application.

Consumer Key (API Key)	iqgDeZHtk7VRkF0jgR9gd1r9V
Consumer Secret (API Secret)	XDim41F1yvAF21ZIFX6MSodJbZEB3yUFJYG4md5F0eZ0h0tuX2
Access Level	Read and write (modify app permissions)
Owner	sheriffjackson
Owner ID	20711189

Application Actions

Regenerate Consumer Key and Secret

Change App Permissions

Your Access Token

You haven't authorized this application for your own account yet.

By creating your access token here, you will have everything you need to make API calls right away. The access token generated will be assigned your application's current permission level.

Token Actions

Create my access token

Save to a file

A terminal window with a blue title bar containing three white window control buttons on the left and the word "Terminal" in the center. The terminal area is white and contains four lines of text, each starting with "export".

```
export TWITTER_CONSUMER=IISZiWWT4CXwdm37pIfNUHAcG
export TWITTER_SECRET=yel sfEqpG379rj5RNQY1slB564ZC0mtKJTZOS8EraRiDURMg4F
export TWITTER_TOKEN=20711189-SW1Jvk7gKfyoOKtJsrkgzerVa00o0rvnnkkHi1SNM
export TWITTER_TOKEN_SECRET=aKhpqc8Xh55kDfG0eQi3Xa6ZP2QS3irIhIH0cJWRIriSf
```

Textbox

<http://textbox.demo.gs/demo>

MACHINE BOX

machinebox.io



textbox_beta

Natural language processing and sentiment analysis

[textbox_beta](#) > Text analyzer demo

Hey everything is awesome, I love everything

Analyze

Reset

Hey everything is awesome, I love everything 😊

JSON

```
{
  "success": true,
  "sentences": [
    {
      "text": " Hey everything is awesome. I love everything".
```

go get packages

A terminal window with a blue title bar containing three white window control buttons on the left and the word "Terminal" in the center. The terminal area is white and contains three lines of text, each starting with a dollar sign followed by the command "go get" and a GitHub repository URL underlined.

```
$ go get github.com/dghubble/go-twitter/twitter  
$ go get github.com/dghubble/oauth1  
$ go get github.com/machinebox/sdk-go/textbox
```

Setup the secrets for twitter



main.go

```
var consumerKey = os.Getenv("TWITTER_CONSUMER")
var consumerSecret = os.Getenv("TWITTER_SECRET")
var consumerToken = os.Getenv("TWITTER_TOKEN")
var consumerTokenSecret = os.Getenv("TWITTER_TOKEN_SECRET")

func main() {
    tweets := getTweets()
    getSentiment(tweets)
}
```


Create twitter client



main.go

```
func getTweets() []twitter.Tweet {  
    config := oauth1.NewConfig(consumerKey, consumerSecret)  
    token := oauth1.NewToken(consumerToken, consumerTokenSecret)  
    httpClient := config.Client(oauth1.NoContext, token)  
  
    // Twitter client  
    client := twitter.NewClient(httpClient)  
}
```

Get the tweets



main.go

```
func getTweets() []twitter.Tweet {  
    // ...  
  
    // Home Timeline  
    tweets, _, _ := client.Timelines.HomeTimeline(  
        &twitter.HomeTimelineParams{  
            Count: 20,  
        },  
    )  
  
    return tweets  
}
```

Create textbox client



```
func getSentiment(tweets []twitter.Tweet) {  
    client := textbox.New("http://textbox.demo.gs")  
}
```

Loop over tweets and get analysis



main.go

```
func getSentiment(tweets []twitter.Tweet) {  
    //...  
  
    for _, tweet := range tweets {  
        analysis, err := client.Check(strings.NewReader(tweet.Text))  
    }  
}
```

Get the sentiment



main.go

```
func getSentiment(tweets []twitter.Tweet) {  
    //...  
  
    sentimentTotal := 0.0  
    for _, sentence := range analysis.Sentences {  
        sentimentTotal += sentence.Sentiment  
    }  
  
    // higher is more positive, lower is more negative  
    sentiment := sentimentTotal / float64(len(analysis.Sentences))  
}
```

Resources:

- <https://github.com/nicholasjackson/textbox-example>
- <https://github.com/machinebox/mood/blob/master/textboxtally/tally.go>
- <https://github.com/nicholasjackson/emojify>
- <https://machinebox.io>
- <http://godoc.org/github.com/machinebox/sdk-go>