

FINISHED ▶ ✖ 📖 ⚙

```

import org.apache.spark.streaming._
import org.apache.spark.streaming.twitter._
import org.apache.spark.storage.StorageLevel
import scala.io.Source
import scala.collection.mutable.HashMap
import java.io.File
import org.apache.log4j.Logger
import org.apache.log4j.Level
import sys.process.StringSeqToProcess

/** Configures the OAuth Credentials for accessing Twitter */
def configureTwitterCredentials(apiKey: String, apiSecret: String, accessToken: String, accessTokenSecret: String) Unit = {
  val configs = new HashMap[String, String] ++= Seq(
    "apiKey" -> apiKey, "apiSecret" -> apiSecret, "accessToken" -> accessToken, "accessTokenSecret" -> accessTokenSecret
  )
  println("Configuring Twitter OAuth")
  configs.foreach { case (key, value) =>
    if (value.trim.isEmpty) {
      throw new Exception("Error setting authentication - value for " + key + " not set")
    }
    val fullKey = "twitter4j.oauth." + key.replace("api", "consumer")
    System.setProperty(fullKey, value.trim)
    println("\tProperty " + fullKey + " set as [" + value.trim + "]")
  }
  println()
}

```

```

// Configure Twitter credentials
val apiKey = "SArrLU3FH1QWM1dzLgrJZQZR"
val apiSecret = "kWKc1hkj04eWxBGveD1ztlIMbay7ny6aY6i289omA5FVGTMVdy"
val accessToken = "824754411826188288-YIKCP2DQNF61gGrrStyZr8RX5LGhSjG"
val accessTokenSecret = "bB5W9q7IfTFVZA64fQ0jEFfjMWhj7DchS8EPqoc1E9V55"
configureTwitterCredentials(apiKey, apiSecret, accessToken, accessTokenSecret)

```



```

import org.apache.spark.streaming.twitter._
import org.apache.spark.storage.StorageLevel
import scala.io.Source
import scala.collection.mutable.HashMap
import java.io.File
import org.apache.log4j.Logger
import org.apache.log4j.Level

Configuring Twitter OAuth
  Property twitter4j.oauth.consumerKey set as [SArrLU3FH1QWM1dzLgrJZQZR]
  Property twitter4j.oauth.accessToken set as [824754411826188288-YIKCP2DQNF61gGrrStyZr8RX5LGhSjG]
  Property twitter4j.oauth.consumerSecret set as [kWKc1hkj04eWxBGveD1ztlIMbay7ny6aY6i289omA5FVGTMVdy]
  Property twitter4j.oauth.accessTokenSecret set as [bB5W9q7IfTFVZA64fQ0jEFfjMWhj7DchS8EPqoc1E9V55]

```

Twitter
Zeppelin

Twitter

Took 22 sec. Last updated by anonymous at January 26 2017, 7:14:28 PM.



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```
import org.apache.spark.streaming.twitter._
val ssc = new StreamingContext(sc, Seconds(2))
val tweets = TwitterUtils.createStream(ssc, None)
val twt = tweets.window(Seconds(60))

case class Tweet(createdAt:Long, text:String)
twt.map(status=>
  Tweet(status.getCreatedAt().getTime()/1000, status.getText())
).foreachRDD(rdd=>rdd.toDF().registerTempTable("tweets"))
twt.print

ssc.start()
```

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```
jes/043756272900000004/K/CSNHE1.jpg , profileBackgroundImageData=true, lang=en , statusesCount=1
10, isGeoEnabled=true, isVerified=false, translator=false, listedCount=2, isFollowRequestSen
false, withheldInCountries=null}, withheldInCountries=null, quotedStatusId=-1, quotedStatus=
ill}
tatusJSONImpl{createdAt=Thu Jan 26 19:17:07 EST 2017, id=824773194036940802, text='RT @BJsWho
sale: Earlier today we fulfilled all @DonorsChoose projects in Charleston, Summerville & are
towns with a $100,000 dona... ', source='<a href="http://twitter.com/download/iphone" rel="no
llow">Twitter for iPhone</a>', isTruncated=false, inReplyToStatusId=-1, inReplyToUserId=-1,
sFavorited=false, isRetweeted=false, favoriteCount=0, inReplyToScreenName='null', geoLocatio
null, place=null, retweetCount=0, isPossiblySensitive=false, lang='en', contributorsIDs=[],
retweetedStatus=StatusJSONImpl{createdAt=Thu Jan 26 16:00:07 EST 2017, id=824723618005454849,
text='Earlier today we fulfilled all @DonorsChoose projects in Charleston, Summerville & area
owns with a $100,000 dona... https://t.co/d9zmpiSsSM', source='<a href="http://twitter.com" r
="nofollow">Twitter Web Client</a>', isTruncated=true, inReplyToStatusId=-1, inReplyToUserId
1, isFavorited=false, isRetweeted=false, favoriteCount=4, inReplyToScreenName='null', geoLoc
ion=null, place=null, retweetCount=3, isPossiblySensitive=false, lang='en', contributorsIDs=
, retweetedStatus=null, userMentionEntities=[UserMentionEntityJSONImpl{name='DonorsChoose',
screenName='DonorsChoose', id=17232815}], urlEntities=[URLEntityJSONImpl{url='https://t.co/d9
```


Took 4 sec. Last updated by anonymous at January 26 2017, 7:16:12 PM.

%sql select * from tweets where text like '%Trump%' limit 10

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Twitter



text

 default

1,485,476,215	RT @realDonaldTrump: Don't let them get to you, #TrumpTrain! https://t...
1,485,476,215	RT @ENTORNOi: Actriz iraní boicotea los Oscar en protesta a Trump
1,485,476,216	RT @AndrewMinDC: @asherhuey @realDonaldTrump No, he's just de
1,485,476,218	RT @Trumpnado2016: Headline Correction: Trump plans to make Am https://t....
1,485,476,222	RT @OfficialSPGB: @realDonaldTrump You said Mexico would pay. N
1,485,476,222	RT @realDonaldTrump: Will be interviewed by @SeanHannity on @Fc
1,485,476,222	RT @ProPublica: "Everything is subject to review," said head of Trum Data, studies, etc, all will be reviewe...

Took 1 sec. Last updated by anonymous at January 26 2017, 7:17:52 PM.

%sql select createdAt, count(1) from tweets group by createdAt order by createdAt

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createdAt	count(1)
1,485,476,590	37
1,485,476,591	41
1,485,476,592	38
1,485,476,593	39
1,485,476,594	41
1,485,476,595	39
1,485,476,596	30
1,485,476,597	29
1,485,476,598	39

Took 3 sec. Last updated by anonymous at January 26 2017, 7:23:23 PM.

def sentiment(s:String) : String = {

val positive = Array("like", "love", "good", "great", "happy", "cool", "the", "one", "that")

val negative = Array("hate", "bad", "stupid", "is")

var st = 0;

val words = s.split(" ")

positive.foreach(p =>

words.foreach(w =>

if(p==w) st = st+1

)

}

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```
)

negative.foreach(p=>
  words.foreach(w=>
    if(p==w) st = st-1
  )
)
if(st>0)
  "positive"
else if(st<0)
  "negative"
else
  "neutral"
}

// Below line works only in spark 1.3.0.
// For spark 1.1.x and spark 1.2.x,
// use sqlc.registerFunction("sentiment", sentiment _) instead.
sqlc.udf.register("sentiment", sentiment _)

sentiment: (s: String)String
res7: org.apache.spark.sql.expressions.UserDefinedFunction = UserDefinedFunction(<function1>,StringType,Some(List(StringType)))
```

Took 2 sec. Last updated by anonymous at January 26 2017, 7:21:49 PM.

```
%sql select sentiment(text), count(1) from tweets where text like '%trump%' group by sentiment
```



UDF(text)	count(1)
neutral	3
negative	2
positive	2

Took 1 sec. Last updated by anonymous at January 26 2017, 7:22:36 PM.

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