

Grebe Social Data Aggregator

RESTful API Version 1.0.3 Documentation

Description:

Get tweets for a given date range and province with options to filter by keywords & fields

Endpoint (authentication required):

<http://199.116.235.207/grebe/api/?start=&end=&province=>

Supported Methods:

GET

Required URL Parameters:

[start=dd-mm-yyyy](#)

[end=dd-mm-yyyy](#)

The maximum date range is 30 days

[province=AB](#)

The geo-coordinate data is used to filter by province if needed. Official two-letter abbreviations are supported¹, and cascading queries are not supported, i.e. only one province can be specified for filtering.

Optional URL Parameters:

[keywords=string1+string2|string3|string4](#)

For keywords' search, both OR and AND operations are supported. For OR operations, i.e. string1 OR string2 OR string3, use the | (pipeline) separator, e.g. string1|string2|string3. For AND operations, i.e. string1 AND string2 AND string3, use the encoded space operator (plus) +, e.g. string1+string2+string3. Combined operations are also supported, e.g. string1+string2|string3|string4 implies string1 AND string2 OR string3 OR string4

¹ Two-Letter Abbreviations for Canadian Provinces <https://www.ncbi.nlm.nih.gov/books/NBK7254/>

Optional URL Parameters (continued):

[fields=field1,field2,field3](#)

The fields returned can be specified, and the field names need to be separated by commas. A subset of the Twitter Field Guide² is mapped to intuitively named Grebe database fields: id, tweet, longitude, latitude, created_at, collected_at, lang, place_name, country_code, user_id, user_name, user_geoenabled, user_lang, user_location, user_timezone, user_verified

The following five fields are returned by default when no fields are specified: tweet, longitude, latitude, created_at, place_name

[download=1](#)

The output from the API can either be displayed in the browser/client or be available as a downloadable file. Setting this option to 1 will create a downloadable file, while setting to any other value, or omitting this option will return the data in the client.

Returned Data Format:

All data is returned in JSON format³. The returned data is downloadable as plaintext. An example request, and returned JSON are given below (formatted and simplified for clarity).

http://199.116.235.207/grebe/api/?start=14-09-2016&end=13-10-2016&province=AB&keywords=edm+yeg|oilers&fields=tweet,user_location

```
[
  {
    "tweet": "Rushed it Oilers",
    "user_location": "United States"
  },
  {
    "tweet": "Late Night at the Edmonton yeg @ Alberta",
    "user_location": "Whyte Ave"
  }
]
```

² Twitter Field Guide <https://dev.twitter.com/overview/api/tweets>

³ Validated JSON RFC-4627, RFC-7159, and ECMA-404 <https://jsonformatter.curiousconcept.com>

API Change Log:

Version	Date	Changes
1.0.3	2017-09-01	<ul style="list-style-type: none">• Move from MongoDB to MariaDB (rationale of more efficient disk usage with comparable performance)• Subfield/dot notation support removed, subset of Twitter Field Guide is mapped to MariaDB fields• Some fields renamed, e.g. <code>text</code> is now <code>tweet</code>, etc.• Added optional output download parameter• Documentation & REST API updated to support new fields
1.0.2	2017-06-18	<ul style="list-style-type: none">• Endpoint change due to move from Digital Ocean to Cybera<ul style="list-style-type: none">◦ New value: <code>http://199.116.235.207/grebe/api/</code>• Minor configuration fixes and documentation updates
1.0.1	2017-06-10	<ul style="list-style-type: none">• Changed endpoint, port number no longer needed<ul style="list-style-type: none">◦ Old value: <code>http://159.203.60.220:5000/grebe/api/</code>◦ New value: <code>http://159.203.60.220/grebe/api/</code>• Province field is now required• Removed paging limitations• Returned data is now downloaded to text file• Resolved field dot notation compatibility issues in returned data
RC 1.0.0	N/A	First stable production version release