Package ‘facebook.S4’

July 12, 2017

Title  Access to Facebook API V2 via a Set of S4 Classes

Description  Provides an interface to the Facebook API and builds collections of elements that reflects the graph architecture of Facebook.
See <https://developers.facebook.com/docs/graph-api> for more information.

Version  1.1.0
Date  2017-07-10

URL  https://gabrielebaldassarre.com/r/facebook


Depends  R (>= 3.0)
Imports  httr (>= 1.1.0), magrittr, rjson, plyr, methods
Suggests  testthat
License  MIT + file LICENSE

NeedsCompilation  no

BuildKeepEmpty  TRUE

Collate  'magrittr.R' 'generic-methods.R'
  'FacebookGenericCollection-class.R'
  'FacebookPagesCollection-class.R'
  'FacebookUsersCollection-class.R'
  'FacebookAlbumsCollection-class.R'
  'FacebookGenericCollection.R' 'FacebookUsersCollection.R'
  'FacebookPagesCollection.R' 'FacebookAlbumsCollection.R'
  'FacebookPostsCollection-class.R'
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  'FacebookConversationsCollection-class.R'
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  'FacebookEventsCollection-class.R' 'FacebookEventsCollection.R'
  'FacebookGenericCollection-methods.R'
  'FacebookGroupsCollection-class.R' 'FacebookGroupsCollection.R'
  'FacebookLikesCollection-class.R' 'FacebookLikesCollection.R'
  'FacebookMessagesCollection-class.R'
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`facebook.videoformats.R`  `fbOAuth.R`  `formatFbDate.R`
`onAttach.R`  `onLoad.R`

RoxygenNote 6.0.1

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Repository CRAN
Date/Publication 2017-07-12 12:49:30 UTC

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as.character,FacebookGenericCollection-method

Return a comma-separated string of all the IDs of the given Facebook collection

Description

This method serializes a Facebook collection extracting all the IDs of its member into a comma-separated string. This could be useful for lazy chaining into other Facebook queries or for debugging purposes.

Usage

```r
## S4 method for signature 'FacebookGenericCollection'
as.character(x)
```

Arguments

- `x` a valid not-null Facebook Collection
**facebook.current.accounts**

*Get the pages the current user currently manages.*

**Description**

`facebook.current.accounts` pulls the list of pages the current user actually manages and put into a `FacebookPagesCollection-class` instance.

**Usage**

```r
facebook.current.accounts(token, parameters = list(),
                          n = getOption("facebook.maxitems"))
```

**Arguments**

- **token**: Either a temporary access token created at [https://developers.facebook.com/tools/explorer](https://developers.facebook.com/tools/explorer) or the OAuth token created with fboauth.
- **parameters**: A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: [https://developers.facebook.com/docs/graph-api/using-graph-api](https://developers.facebook.com/docs/graph-api/using-graph-api).
- **n**: An integer value with the maximum number of participants to be pulled for each conversation in `id`. It can be set to Inf to pull out any participant of a given conversation and assumes the default value to `facebook.maxitems` global option if missing.

---

**c,FacebookGenericCollection-method**

*Combine two or more Facebook collections*

**Description**

This method combines two or more Facebook collections of the same kind. Please note that duplicates are removed unless they have different parents.

**Usage**

```r
## S4 method for signature 'FacebookGenericCollection'
c(x, ..., recursive = FALSE)
```

**Arguments**

- **x**: the first collection to chain into
- **...**: the other collections to chain from
- **recursive**: not used in this context
facebook.image.formats

Details

This function requires the use of an OAuth token with pages_show_list permission granted.

Only the id and the type is returned in a mixed collection. In normal circumstances, type is always equal to page.

Value

A collection of mixed accounts in a FacebookMixedCollection-class object with the id and the type for each element included.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

fbOAuth

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

admin.pages <- facebook.current.accounts(fb_oauth)

extended.pages <- admin.pages %>% FacebookPagesCollection()

## End(Not run)
```

facebook.image.formats

Pull the list of image formats available from a set of photos

Description

facebook.image.formats pulls information about the formats of a set of photos in a FacebookPhotosCollection-class and push into a named list.

Usage

```r
facebook.image.formats(id, token = NULL, parameters = list(),
   fields = c("source", "height", "width"),
   .progress = create_progress_bar())
```
Arguments

id
An existing FacebookPhotosCollection.

token
Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboauth. If it’s NULL, the token from id is used.

parameters
A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.

fields
A character vector with the fields to get for each id.

.progress
progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Value
A named list with all the formats of the given photos. The name of is set to the id of the photo.

Valid sources

- FacebookPhotosCollection-class will build a collection with the formats available for the photos in the source collection.

Author(s)
Gabriele Baldassarre https://gabrielebaldassarre.com

See Also
FacebookAlbumsCollection, FacebookPhotosCollection

Examples

```r
# Not run:
# See examples for fboauth to know how token was created.
load("fb_oauth")

# Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                         "NathanNeverSergioBonelliEditore"),
                                       token = fb_oauth)

# Pull at most 10 albums from each page
fb.albums <- FacebookAlbumsCollection(id = fb.pages, token = fb_oauth, n = 10)

# Pull all the available photos from each album
fb.photos.inf <- FacebookPhotoscollection(id = fb.albums, n = Inf)

# Pull all the available formats for those photos
fb.images.inf <- FacebookImagescollection(id = fb.photos.inf, n = Inf)
```
facebook.object.likes

## End (Not run)

### Description

facebook.object.likes pulls information about the likes from a list of Facebook IDs and/or names of users or pages and push them into a FacebookMixedCollection-class instance.

### Usage

```r
call facebook.object.likes(id, token = NULL, parameters = list(),
                         n = getOption("facebook.maxitems"), .progress = create_progress_bar())
```

### Arguments

- **id**: An existing FacebookUsersCollection or FacebookPagesCollection
- **token**: Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If NULL and id is a Collection, get that one instead. Otherwise, no query is performed to the Facebook Graph API and an empty Collection is returned.
- **parameters**: A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api
- **n**: An integer value with the maximum number of participants to be pulled for each conversation in id. It can be set to Inf to pull out any participant of a given conversation and assumes the default value to facebook.maxitems global option if missing.
- **.progress**: progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console.

### Details

This function requires the use of a OAuth token with user_likes permission granted. After the introduction of version 2.0 of the Graph API, only likes from users who are using the application that you used to generate the token to query the API will be returned.

Only the id and the type is returned in a mixed collection. Then, a proper collection for each type must be built accordingly.

### Value

A collection of mixed likes in a FacebookMixedCollection-class object with the id and the type for each element included.
facebook.participants

**Author(s)**

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

**See Also**

*facebook.search, fboAuth*

**Examples**

```r
## Not run:
## See examples for fboAuth to know how token was created.
load("fb_oauth")

## Returns the id and the type of the current user's likes
me.likes <- facebook.users.likes(id = "me", token = fb_oauth)

## Do the same, but starting from a users collection
me.likes <- FacebookUsersCollection(id="me", fb_oauth) %>% facebook.users.likes()

## Build a pages collection from all the pages (and ONLY the pages)
## the current user likes
me.likes.pages <- me.likes %>% FacebookPagesCollection()

## End(Not run)
```

---

**Description**

`facebook.participants` pulls information about the users and the pages who took part of a set of inbox conversations in a `FacebookConversationsCollection-class` and push into a `FacebookMixedCollection-class` instance.

**Usage**

```r
defacebook.participants(id, token = NULL, parameters = list(),
                        n = getOption("facebook.maxitems"), .progress = create_progress_bar())
```

**Arguments**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>id</td>
<td>An existing <code>FacebookConversationsCollection</code>.</td>
</tr>
<tr>
<td>token</td>
<td>Either a temporary access token created at <a href="https://developers.facebook.com/tools/explorer">https://developers.facebook.com/tools/explorer</a> or the OAuth token created with <code>fboAuth</code>. If it's <code>NULL</code>, the token from <code>id</code> is used. Otherwise, no query is performed to the Facebook Graph API and an empty Collection is returned.</td>
</tr>
</tbody>
</table>
parameters  A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.

n  An integer value with the maximum number of participants to be pulled for each conversation in id. It can be set to Inf to pull out any participant of a given conversation and assumes the default value to facebook.maxitems global option if missing.

.progress  progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

This function requires the use of a OAuth page access token with read_pages_mailboxes permission granted if id is a collection of pages conversations or a user access token with read_mailbox permission granted and **when the users are developers for the application making the request** if id is a collection of users’ conversations.

Only the id and the type is returned in a mixed collection. Then, a proper collection for each type could be built accordingly.

Since this is a finder function, duplicated id won’t be removed to the output collection if they have a different parent.

Value

A collection of users and pages in a FacebookMixedCollection-class object with the id and the type for each element included.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

FacebookConversationsCollection, facebook.search, facebook.senders

Other FacebookFinders: facebook.senders

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Returns the conversations of the current user
my.conversations <- FacebookUsersCollection(id="me", fb_oauth) %>%
  FacebookConversationsCollection()

## Who talks to the current users
participants <- facebook.participants(my.conversations) %>%
  FacebookUsersCollection()
```
facebook.permissions

Extract information about the permissions for the current user

Description

facebook.permissions retrieves informations about the permissions the current user actually has with the current application.

Usage

facebook.permissions(token)

Arguments

token

Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fb0Auth.

Details

facebook.permissions returns a character vector where each row is an action the authenticated user is granted to perform through Facebook Graph API with the current token.

Author(s)

Gabriele Baldassarre

See Also

fb0Auth

Examples

## Not run:
## See examples for fb0Auth to know how token was created.
## Getting information about current user's permissions.
load("fb_oauth")
me.permissions <- facebook.permissions(token=fb_oauth)

## End(Not run)
Description

This package provides a series of functions that allow R users to access Facebook’s API and builds collections of items that model and mimic the graph organization and network relations between different elements.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

fboAuth, FacebookUsersCollection, FacebookPagesCollection, FacebookPostsCollection, FacebookCommentsCollection

facebook.search

Perform a search on Facebook

Description

facebook.search retrieves public content that mention a given keyword(s) and for a given type. Please note that each type has its unique set of fields, as referenced on official documentation https://developers.facebook.com/docs/graph-api/using-graph-api/v2.5#search

Since this is a finder function, duplicated id won’t be removed to the output collection unless they also have the same parent.

Usage

```r
facebook.search(query, token, parameters = list(),
    n = getOption("facebook.maxitems"), type = c("page", "group"))
```

Arguments

- **query**: A character vector containing keywords to search in OR condition.
- **token**: Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboAuth.
- **parameters**: A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.
- **n**: Maximum number of elements to return for each type.
- **type**: A character vector containing the types of content to get. Valid content types are user, page, event, group, place
facebook.senders

Value

A FacebookMixedCollection-class collection with the id and the type for each element included.

Author(s)

Gabriele Baldassarre https://gabriellebaldassarre.com

See Also

fbOAuth

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
## Searching 100 public pages that mention cats
load("fb_oauth")
pages <- facebook.search(query="cats", type="page", token=fb_oauth, n=100)

## End(Not run)
```

---

facebook.senders  
Pull the list of senders from a set of inbox conversations

Description

facebook.senders pulls information about the users who have sent a message in a set of inbox page conversations in a FacebookConversationsCollection-class and pushes into a FacebookMixedCollection-class instance.

Usage

```r
facebook.senders(id, token = NULL, parameters = list(),
                 n = getOption("facebook.maxitems"), .progress = create_progress_bar())
```

Arguments

- **id**: An existing FacebookConversationsCollection.
- **token**: Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If it's NULL, the token from id is used. Otherwise, no query is performed to the Facebook Graph API and an empty Collection is returned.
- **parameters**: A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.
/facebook.senders

n

An integer value with the maximum number of senders to be pulled for each conversation in id. It can be set to Inf to pull out any sender of a given conversation and assumes the default value to facebook.maxitems global option if missing.

.progress

progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

This function requires the use of a OAuth page access token with read_pages_mailboxes permission granted.

Only the id and the type is returned in a mixed collection. Then, a proper collection for each type could be built accordingly.

Since this is a finder function, duplicated id won’t be removed to the output collection unless they also have the same parent.

Value

A collection of users in a FacebookMixedCollection-class object with the id and the type for each element included.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

FacebookConversationsCollection, facebook.search, facebook.participants

Other FacebookFinders: facebook.participants

Examples

## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Returns the conversations of a given page
conversations <- FacebookPagesCollection(id="9thcirclegames", fb_oauth) %>%
   FacebookConversationsCollection()

## Who sent a message to the page
senders <- facebook.senders(conversations) %>% FacebookUsersCollection()

## End(Not run)
facebook.video.formats

Pull the list of video formats available from a set of photos

Description

facebook.video.formats pulls information about the formats of a set of photos in a link{FacebookPhotosCollection-class} and push into a named list.

Usage

```r
facebook.video.formats(id, token = NULL, parameters = list(),
  fields = c("embed_html", "picture", "filter", "height", "width"),
  progress = create_progress_bar())
```

Arguments

- **id**: An existing `FacebookPhotosCollection`.
- **token**: Either a temporary access token created at `https://developers.facebook.com/tools/explorer` or the OAuth token created with `fbOAuth`. If it’s `NULL`, the token from `id` is used.
- **parameters**: A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: `https://developers.facebook.com/docs/graph-api/using-graph-api`.
- **fields**: A character vector with the fields to get for each id.
- **progress**: `progress_bar` object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See `create_progress_bar` for details.

Value

A named list with all the formats of the given photos. The name of is set to the `id` of the photo.

Valid sources

- `FacebookVideosCollection-class` will build a collection with the formats available for the videos in the source collection.

Author(s)

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

See Also

`FacebookAlbumsCollection`, `FacebookPhotosCollection`
**Description**

Connect to Facebook Graph API, get information from a list of public Facebook albums and build a `FacebookAlbumsCollection-class` instance.

**Usage**

```r
FacebookAlbumsCollection(id, token = NULL, parameters = list(), 
fields = c("id", "cover_photo", "from.fields(id,name)", "created_time", 
"description", "name", "count"), n = getOption("facebook.maxitems"), 
metadata = FALSE, .progress = create_progress_bar())
```

**Arguments**

- `id` A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).
- `token` Either a temporary access token created at [https://developers.facebook.com/tools/explorer](https://developers.facebook.com/tools/explorer) or the OAuth token created with `fboauth`. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.
- `parameters` A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: [https://developers.facebook.com/docs/graph-api/using-graph-api](https://developers.facebook.com/docs/graph-api/using-graph-api).
- `fields` A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.
- `n` If id is an iterable collection, then n is the maximum number of albums to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available public album and assumes the default value from the value of `facebook.maxitems` global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.
- `metadata` If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.
- `.progress` progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See `create_progress_bar` for details.

**Details**

`FacebookAlbumsCollection` is the constructor for the `FacebookAlbumsCollection-class`. It returns data about albums but doesn’t return lists of comments or likes, although it **does** return an approximate total count for both (depending on privacy settings of the users).
FacebookAlbumsCollection

Value

A collection of albums in a FacebookAlbumsCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id,source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id,name).

Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookPagesCollection-class will build a collection with the albums created on the pages in the source collection.
- FacebookUsersCollection-class will build a collection with the albums created the users in the source collection. Users must have granted the user_photos permission to the current application to be able to perform this action.
- FacebookGroupsCollection-class will build a collection with the albums created in the groups in the source collection. Users must have granted the user_managed_groups permission to the current application to be able to perform this action.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

FacebookPagesCollection, FacebookUsersCollection, fbOAuth

Other Facebook Collection Constructors: FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
  "NathanNeverSergioBonelliEditore"),
token = fb_oauth)

## Pull at most 10 albums from each page
fb.albums <- FacebookAlbumsCollection(id = fb.pages, token = fb_oauth, n = 10)
## Pull all the available albums from each page
fb.albums.inf <- FacebookAlbumsCollection(id = fb.pages, token = fb_oauth, n = Inf)
## Convert the collection to a data frame
fb.albums.df <- as.data.frame(fb.albums)
# The same as before in a more compact fashion using the pipe operator
# chaining from a Pages Collection
fb.albums.pipe <- FacebookPagesCollection(id = c("9thcirclegames",
                           "NathanNeverSergioBonelliEditore"),
                           token = fb_oauth) %>% FacebookAlbumsCollection(n = 10)
## End(Not run)

---

**FacebookAlbumsCollection-class**

*Class for representing a collection of Facebook albums*

---

**Description**

This class is used to collect Facebook albums in a convenient structure.

Use the `FacebookAlbumsCollection` constructor for building a instance of this class, as it provides better sanity and validation checks.

**Slots**

data The raw data in a list form and as pulled from Facebook  
id A character vector with the id of the items included in the collection  
fields A character vector with the fields included for each ID in the collection. Ie. id, name, created_time...  
token Either a temporary access token created at https://developers.facebook.com/tools/explo...er or the OAuth token created with fbOAuth used to fill the collection.  
parent A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance  
parent.collection The collection used to build this one, or NA if the collection was built from a character vectors of ids.  
type A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE  

**Author(s)**

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)
See Also

Other Facebook Collections: FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class

FacebookCommentsCollection

Build a collection of Facebook comments to posts

Description

Connect to Facebook Graph API, get information from a list of Facebook comments to posts and build a FacebookPostsCollection-class instance.

Usage

FacebookCommentsCollection(id, token = NULL, parameters = list(),
   fields = c("id", "from.fields(id,name)", "message", "created_time"),
   n = getOption("facebook.maxitems"). metadata = FALSE,
   .progress = create_progress_bar())

Arguments

id
   A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).

token
   Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fBOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.

parameters
   A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.

fields
   A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.

n
   If id is an iterable collection, then n is the maximum number of comments to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available comment and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.

metadata
   If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.
FacebookCommentsCollection

.progress progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

FacebookCommentsCollection is the constructor for the FacebookCommentsCollection-class. It returns data about comments but doesn’t return lists of their own comments or likes, although it does return an approximate total count for both (depending on the privacy settings of the users).

Value

A collection of comments in a FacebookCommentsCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id,source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id,name).

Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookPostsCollection-class will build a collection with the comments to the posts in the source collection.
- FacebookPhotosCollection-class will build a collection with the comments to the photos in the source collection. The author of the photo may grant the user_photos to the current application to perform this action.
- FacebookVideosCollection-class will build a collection with the comments to the videos in the source collection. The author of the photo may grant the user_videos to the current application to perform this action.
- FacebookCommentsCollection-class will build a collection with the replies to the comments in the source collection.
- FacebookEventsCollection-class will build a collection with the comments to the events in the source collection.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com
See Also

FacebookLikesCollection, FacebookPostsCollection, fbOauth

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

```r
## Not run:
## See examples for fbOauth to know how token was created.
load("fb_oauth")

## Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                         "NathanNeverSergioBonelliEditore"),
                                      token = fb_oauth)

## Pull the latest 10 posts from each page in a post collection
fb.posts <- FacebookPostscollection(id = fb.pages, token = fb_oauth, n = 10)

## Pull all the available posts from each page in a post collection
fb.posts.inf <- FacebookPostscollection(id = fb.pages, token = fb_oauth, n = Inf)

## Pull all the available comments from each post of the first collection
fb.comments.inf <- FacebookPostscollection(id = fb.posts, token = fb_oauth)

## Convert the collection to a data frame
fb.comments <- as.data.frame(fb.comments)

# The same as before in a more compact fashion using the pipe operator
# chaining first from a pages and then a posts collection
fb.comments.pipe <-
  FacebookPagesCollection(id = c("9thcirclegames",
                               "NathanNeverSergioBonelliEditore"),
                         token = fb_oauth) %>%
  FacebookPostscollection(n = 10) %>%
  FacebookCommentsCollection(n = Inf)

## End(Not run)
```
Description

This class is used to collect Facebook comments in a convenient structure. Use the `FacebookCommentsCollection` constructor for building a instance of this class, as it provides better sanity and validation checks.

Slots

data  The raw data in a list form and as pulled from Facebook
id   A character vector with the id of the items included in the collection
fields A character vector with the fields included for each ID in the collection
  Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboauth used to fill the collection.
parent A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance
parent.collection The collection used to build this one, or NA if the collection was built from a character vectors of ids.
type   A character vector with the type of each element of the collection. It's set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: `FacebookAlbumsCollection-class`, `FacebookConversationsCollection-class`, `FacebookEventsCollection-class`, `FacebookGenericCollection-class`, `FacebookGroupsCollection-class`, `FacebookLikesCollection-class`, `FacebookMessagesCollection-class`, `FacebookMixedCollection-class`, `FacebookPagesCollection-class`, `FacebookPhotosCollection-class`, `FacebookPostsCollection-class`, `FacebookReactionsCollection-class`, `FacebookVideosCollection-class`

---

`FacebookConversationsCollection`

`Build a collection of Facebook inbox conversations`

---

Description

Connect to Facebook Graph API, get information from a list of inbox conversations and build a `FacebookConversationsCollection-class` instance.

Usage

```r
FacebookConversationsCollection(id, token = NULL, parameters = list(),
   fields = c("id", "snippet", "updated_time", "message_count"),
   n = getOption("facebook.maxitems"), metadata = FALSE,
   .progress = create_progress_bar())
```
Arguments

id
A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).

token
Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.

parameters
A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.

fields
A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.

n
If id is an iterable collection, then n is the maximum number of conversations to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available conversation and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.

metadata
If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.

.progress
progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

FacebookConversationsCollection is the constructor for the FacebookConversationsCollection-class. It returns data about inbox conversations of users or pages but doesn’t return lists of messages or users involved.

A FacebookMessagesCollection-class can be built on top to pull out the messages of each conversation.

Value

A collection of conversations in a FacebookConversationsCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id, source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id, name).
Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookPagesCollection-class will build a collection with all the inbox conversations to pages of the source collection. A page access token with `read_page_mailboxes` is needed to read the related mailboxes.
- FacebookUsersCollection-class will build a collection with all the conversations that person is involved with if they are a developer of the application making the request. A user access token with `read_mailbox` is needed to perform this action.
- FacebookMixedCollection-class will build a collection with all the conversations, filtering only to the user and page in the source collection.

Author(s)

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

See Also

FacebookMessagesCollection, facebook.participants, facebook.senders

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_page_oauth")

## Getting the conversations of an example page. A page access token is needed to access the inbox conversations <- FacebookConversationsCollection(FacebookPagesCollection(
    "9thcirclegames", fb_page_oauth))

## End(Not run)
```

---

**FacebookConversationsCollection-class**

*Class for representing a collection of Facebook inbox conversations of users or pages*

---

**Description**

This class is used to collect Facebook inbox conversations in a convenient structure.
Slots

- **data**: The raw data in a list form and as pulled from Facebook.
- **id**: A character vector with the id of the items included in the collection.
- **fields**: A character vector with the fields included for each ID in the collection. I.e., id, name, created_time...
- **token**: Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboauth used to fill the collection.
- **parent**: A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance.
- **parent.collection**: The collection used to build this one, or NA if the collection was built from a character vectors of ids.
- **type**: A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE.

Author(s)

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class.

---

**FacebookEventsCollection**

*Build a collection of Facebook events*

Description

Connect to Facebook Graph API, get information from a list of Facebook events and build a FacebookEventsCollection-class instance.

Usage

```r
FacebookEventsCollection(id, token = NULL, parameters = list(), fields = c("id", "owner.fields(id,name)", "category", "description", "end_time", "attending.count", "declined_count", "maybe_count", "noreply.count", "interested_count"), n = getOption("facebook.maxitems"), metadata = FALSE, .progress = create_progress_bar())
```
Arguments

id
A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).

token
Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.

parameters
A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.

fields
A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.

n
If id is an iterable collection, then n is the maximum number of events to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available event and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.

metadata
If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.

.progress
progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

FacebookEventsCollection is the constructor for the FacebookEventsCollection-class. It returns metadata about events but doesn’t return the list of attenders by default.

Value

A collection of events in a FacebookEventsCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id, source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id, name).
Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- **FacebookUsersCollection-class** will build a collection with the events of the users in the source collection. By default, only the attending events are returned, but this behaviour can be changed using the `type=(attending|created|declined|maybe|not_replied)` parameter.
- **FacebookPagesCollection-class** will build a collection with the events linked to the pages in the source collection.
- **FacebookGroupsCollection-class** will build a collection with the events linked to the groups in the source collection.

Author(s)

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

See Also

FacebookGroupsCollection, FacebookPagesCollection

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                          "NathanNeverSergioBonelliEditore"),
                                          token = fb_oauth)

## Pull at most 10 albums from each page
fb.events <- FacebookEventsCollection(id = fb.pages, token = fb_oauth, n = 10)

## End(Not run)
```
Description

This class is used to collect Facebook events in a convenient structure.
Use the FacebookEventsCollection constructor for building an instance of this class, as it provides better sanity and validation checks.

Slots

data  The raw data in a list form and as pulled from Facebook
id   A character vector with the id of the items included in the collection
fields A character vector with the fields included for each ID in the collection. I.e. id, name, created_time...
token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboauth used to fill the collection.
parent A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance
parent.collection The collection used to build this one, or NA if the collection was built from a character vectors of ids.
type  A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class

---

Build a collection of Facebook groups

Description

Connect to Facebook Graph API, get information from a list of public Facebook groups and build a FacebookGroupsCollection-class instance.

Usage

FacebookGroupsCollection(id, token = NULL, parameters = list(),
fields = c("id", "cover.fields(source)", "owner.fields(id,name)",
"created_time", "description", "name", "link"),
n = getOption("facebook.maxitems"); metadata = FALSE,
.progress = create_progress_bar())
FacebookGroupsCollection

Arguments

id      A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).

token   Either a temporary access token created at https://developers.facebook. com/tools/explorer or the OAuth token created with fbOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.

parameters  A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook. com/docs/graph-api/using-graph-api.

fields   A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.

n       If id is an iterable collection, then n is the maximum number of groups to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available public group and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.

metadata   If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.

.progress    progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

FacebookGroupsCollection is the constructor for the FacebookGroupsCollection-class. It returns data about groups but doesn’t return it member lists, although it does return an approximate total count for both (depending on privacy settings of the users).

Value

A collection of groups in a FacebookGroupsCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id,source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id,name).
Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- **FacebookUsersCollection-class** will build a collection with the groups the users in the source collection belong to, assuming they granted the `user_managed_groups` permission.

Author(s)

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

See Also

- `FacebookAlbumsCollection`, `FacebookUsersCollection`, `fbOauth`

Other Facebook Collection Constructors: `FacebookAlbumsCollection`, `FacebookCommentsCollection`, `FacebookConversationsCollection`, `FacebookEventsCollection`, `FacebookLikesCollection`, `FacebookMessagesCollection`, `FacebookPagesCollection`, `FacebookPhotosCollection`, `FacebookPostsCollection`, `FacebookReactionsCollection`, `FacebookUsersCollection`, `FacebookVideosCollection`

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Pull at most 10 groups from the current user
fb.groups <- FacebookUsersCollection("me", fb_oauth) %>% FacebookGroupscollection(n = 10)

## Get the members of these groups
fb.members <- FacebookUsersCollection(fb.groups)

## Convert the collection to a data frame
fb.groups.df <- as.data.frame(fb.groups)

## End(Not run)
```

---

**FacebookGroupsCollection-class**

*Class for representing a collection of Facebook groups*

Description

This class is used to collect Facebook groups in a convenient structure.

Use the **FacebookGroupsCollection** constructor for building a instance of this class, as it provides better sanity and validation checks.
Slots

data  The raw data in a list form and as pulled from Facebook
id  A character vector with the id of the items included in the collection
fields  A character vector with the fields included for each ID in the collection. I.e. id, name, created_time...
token  Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboauth used to fill the collection.
parent  A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance
parent.collection  The collection used to build this one, or NA if the collection was built from a character vectors of ids.
type  A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class

FacebookLikesCollection

Build a collection of Facebook likes to posts and comments

Description

Connect to Facebook Graph API, get information from a list of likes to public posts or comments and build a FacebookLikesCollection-class instance.

Usage

FacebookLikesCollection(id, token = NULL, parameters = list(),
  fields = c("id", "name", "profile_type"),
  n =getOption("facebook.maxitems"), metadata = FALSE,
  .progress = create_progress_bar())
FacebookLikesCollection

Arguments

- **id**: A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).
- **token**: Either a temporary access token created at [https://developers.facebook.com/tools/explorer](https://developers.facebook.com/tools/explorer) or the OAuth token created with fbOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.
- **parameters**: A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: [https://developers.facebook.com/docs/graph-api/using-graph-api](https://developers.facebook.com/docs/graph-api/using-graph-api).
- **fields**: A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.
- **n**: If id is an iterable collection, then n is the maximum number of likes to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available public like and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.
- **metadata**: If set to TRUE, the metadata for each ID is pulled with the data and the type slot is filled accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.
- **.progress**: progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

FacebookLikesCollection is the constructor for the FacebookLikesCollection-class. It returns data about likes to posts or comments but doesn’t return the comments or posts themselves.

Since Facebook doesn’t provide a key for a single like, the ID slot for this kind of collection doesn’t uniquely identify a like on Facebook. The id (the user who put the like) coupled with the parent (the place where she put the like) identifies a unique key for the like.

As a consequence, you cannot build a likes collection starting from atomic IDs, but you must pass an instance of a Facebook Posts Collection or a Facebook Comments Collection built using the construction FacebookPostsCollection or FacebookCommentsCollection as id parameter.

Value

A collection of likes in a FacebookLikesCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id, source).
FacebookLikesCollection

Following the same philosophy, if you need only id and name for the from node you can use `from.fields(id, name)`.

**Valid sources**

Instead of a character vector, one of these collections can also be passed as parameter in `id`:

- **FacebookPostsCollection-class** will build a collection with all the likes to the posts of the source collection
- **FacebookCommentsCollection-class** will build a collection with all the likes to the comments of the source collection
- **FacebookUsersCollection-class** will build a collection with the posts written on the walls of the users in the source collection.
- **FacebookPhotosCollection-class** will build a collection with the likes to the photos in the source collection. The author of the photo may grant the `user_photos` to the current application to perform this action.
- **FacebookVideosCollection-class** will build a collection with the likes to the videos in the source collection. The author of the photo may grant the `user_videos` to the current application to perform this action.

**Author(s)**

Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

**See Also**

FacebookCommentsCollection, FacebookPostsCollection, facebook.object.likes, fbOAuth

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

**Examples**

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                         "NathanNeverSergioBonelliEditore"),
                                         token = fb_oauth)

## Pull the latest 10 posts from each page in a pages collection
fb.posts <- FacebookPostsCollection(id = fb.pages, token = fb_oauth, n = 10)

## Pull all the likes from each element of the posts collection
fb.posts.likes <- FacebookLikesCollection(fb.posts, fb_token, n = Inf)

## Pull all the available comments from each post of the post collection
```
FacebookLikesCollection-class

Class for representing a Collection of Facebook likes

Description
This class is used to collect Facebook likes in a convenient structure.
Use the `FacebookLikesCollection` constructor for building an instance of this class, as it provides better sanity and validation checks.

Details
Although they are named the same in the Facebook jargon, likes to posts or comments are different to users' likes. This collection covers the first, while the `facebook.object.likes` the latter.

Slots
- **data** The raw data in a list form and as pulled from Facebook
- **id** A character vector with the id of the items included in the collection
- **fields** A character vector with the fields included for each ID in the collection. I.e. id, name, created_time...
- **token** Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth used to fill the collection.
- **parent** A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance
- **parent.collection** The collection used to build this one, or NA if the collection was built from a character vectors of ids.
- **type** A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

```r
fb.comments <- FacebookPostsCollection(id = fb.posts, token = fb_oauth, n = Inf)

## Pull all the likes from each element of the comments collections
fb.comments.likes <- FacebookLikesCollection(id = fb.comments, token = fb_oauth, n = Inf)

## Convert the collection to a data frame
fb.posts.likes.df <- as.data.frame(fb.posts.likes)

# The same as before in a more compact fashion using the pipe operator
# chaining from a Pages then to a Posts Collection and finally building a Likes Collection
fb.posts.likes.pipe <-
   FacebookPagesCollection(id = c("9thcirclegames",
                           "NathanNeverSergioBonelliEditore"),
                           token = fb_oauth) %>%
   FacebookPostsCollection(n = 10) %>%
   FacebookLikesCollection(n = Inf)

## End(Not run)
```
FacebookMessagesCollection

Build a collection of Facebook inbox messages

Description

Connect to Facebook Graph API, get information from a list of inbox messages and build a FacebookMessagesCollection instance.

Usage

FacebookMessagesCollection(id, token = NULL, parameters = list(),
fields = c("id", "from", "created_time", "message"),
n = Option("facebook.maxitems"), metadata = FALSE,
.progress = create_progress_bar())

Arguments

id A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).

token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.

parameters A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.

fields A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.

n If id is an iterable collection, then n is the maximum number of conversations to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available conversation and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.
FacebookMessagesCollection

metadata
If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.

.progress
progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details
FacebookMessagesCollection is the constructor for the FacebookMessagesCollection-class. It returns data about inbox messages between users or users and pages.

Value
A collection of messages in a FacebookMessagesCollection-class object.

Valid sources
Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookConversationsCollection-class will build a collection with all the messages from the given conversations. A page access token with read_page_mailboxes is needed to read the related mailboxes user access token with read_mailbox is needed to perform this action, in case of conversations between users.

Author(s)
Gabriele Baldassarre https://gabriellebaldassarre.com

See Also
FacebookConversationsCollection, facebook.participants, facebook.senders

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_page_oauth")

## Getting the messages of the first conversation of an example page.
## A page access token is needed to access the inbox
messages <- FacebookPagesCollection("9thcirclegames", fb_page_oauth) %>%
  FacebookConversationsCollection(n = 1) %>%
  FacebookMessagesCollection()

## End(Not run)
```
FacebookMessagesCollection-class

Class for representing a collection of Facebook messages between users or users and pages

Description

This class is used to collect Facebook inbox messages in a convenient structure.

Slots

data  The raw data in a list form and as pulled from Facebook
id   A character vector with the id of the items included in the collection
fields  A character vector with the fields included for each ID in the collection. Ie. id, name, created_time...
token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboauth used to fill the collection.
parent  A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance
parent.collection  The collection used to build this one, or NA if the collection was built from a character vectors of ids.
type  A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class

FacebookMixedCollection-class

A generic collection of Facebook elements

Description

This class is used to collect in a convenient structure elements of any kind.
Details

This collection should not be built directly, as it performs no sanity check on its content. However, among all the available collections, it's the only one that can have mixed content inside, so many finder functions like `facebook.search` or `facebook.object.likes` fill this as return value. But, for the same reason, it cannot hold fields different from `id`.

If you exactly know what you’re doing you could eventually build an instance of this class to perform generic queries to Graph API, but it’s not guaranteed to work and it probably won’t, actually.

Slots

data A character vector of the raw data in a list form and as pulled from Facebook

id A character vector with the id of the items included in the collection

fields A character vector with the fields included for each ID in the collection. I.e. `id`, `name`, `created_time`...

token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with `fboauth` used to fill the collection.

parent A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance

parent.collection The collection used to build this one, or NA if the collection was built from a character vectors of `ids`.

type A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class

---

FacebookPagesCollection

Build a collection of Facebook pages

---

Description

Connect to Facebook Graph API, get information from a list of public Facebook pages and build a FacebookPagesCollection-class instance.
Usage

FacebookPagesCollection(id, token = NULL, parameters = list(),
fields = c("id", "username", "name", "about", "category", "description",
"fan_count", "link", "talking_about_count"), metadata = FALSE,
.progress = create_progress_bar())

Arguments

id A character vector or a comma-delimited string of IDs or an existing Facebook
Collection of any of the supported types (see below).
token Either a temporary access token created at https://developers.facebook.
com/tools/explorer or the OAuth token created with fbOAuth. If token NULL
and id is a collection, use the token of the source collection. Otherwise, no
query is performed to the Facebook Graph API and an empty collection is re-
turned.
parameters A list of parameters to be added to the Facebook Graph API query. For more in-
formation on the accepted parameters, see: https://developers.facebook.
com/docs/graph-api/using-graph-api.
fields A character vector with the fields to get for each id. If no value for a given field
is found, it will be set to NULL.
metadata If set to TRUE, the metadata for each ID is pulled with the data and the type slot
is fed accordingly. Please note that setting this to TRUE could considerably slow
down the execution time, as more queries are needed.
.progress progress_bar object as defined in the plyr package. By default the none progress
bar is used, which prints nothing to the console. See create_progress_bar for
details.

Details

FacebookPagesCollection is the constructor for the FacebookPagesCollection-class. It re-
turns data about pages but doesn’t return lists of posts or the fanbase (although it will return a
summary view for the latter).

Value

A collection of pages in a FacebookPagesCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each
field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others:
cover.fields(id,source).

Following the same philosophy, if you need only id and name for the from node you can use
from.fields(id,name).
Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookPagesCollection-class will build a collection with the same elements as the source collection.
- FacebookMixedCollection-class will build a collection with only the page elements of the source collection.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

FacebookPostsCollection, FacebookCommentsCollection, fbOauth

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection,
FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection,
FacebookLikesCollection, FacebookMessagesCollection, FacebookPhotosCollection, FacebookPostsCollection,
FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

```r
## Not run:
## See examples for fbOauth to know how token was created.
load("fb_oauth")

## Getting information about 9th Circle Games' Facebook Page
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                        "NathanNeverSergioBonelliEditore"),
                                   token = fb_oauth)

## Getting informations from the same pages, but with a different set of fields
fb.pages.covers <- FacebookPagesCollection(id = fb.pages,
                                           fields = c("id",
                                                      "name",
                                                      "cover.fields(id,source,height,width)")
)  

## Convert the collection to a data frame
fb.pages.df <- as.data.frame(fb.pages)

## Build a collection of the pages the current user likes
likes.pages <- FacebookUsersCollection("me", fb_token = "") %>%
               facebook.object.likes() %>%
               FacebookPagesCollection()

## End(Not run)
```
FacebookPagesCollection-class

Class for representing a collection of Facebook pages

Description

This class is used to collect Facebook pages in a convenient structure.

Use the FacebookPagesCollection constructor for building a instance of this class, as it provides better sanity and validation checks.

Slots

data  The raw data in a list form and as pulled from Facebook

id   A character vector with the id of the items included in the collection

fields A character vector with the fields included for each ID in the collection. Ie. id, name, created_time...

token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fBoAuth used to fill the collection.

parent A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance

parent.collection The collection used to build this one, or NA if the collection was built from a character vectors of ids.

type A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class
Build a collection of Facebook photos to posts

Description

Connect to Facebook Graph API, get information from a list of Facebook photos to posts and build a FacebookPhotosCollection-class instance.

Usage

```r
facebookphotoscollection(id, token = NULL, parameters = list(),
fields = c("id", "from.fields(id,name)", "link", "created_time"),
n = getOption("facebook.maxitems"), metadata = FALSE,
.progress = create_progress_bar())
```

Arguments

- **id**: A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).
- **token**: Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If token is NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.
- **parameters**: A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.
- **fields**: A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.
- **n**: If id is an iterable collection, then n is the maximum number of photos to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available photo and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.
- **metadata**: If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.
- **.progress**: progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.

Details

FacebookPhotosCollection is the constructor for the FacebookPhotosCollection-class. It returns metadata about photos but doesn’t return the raw image nor the various image formats available.
FacebookPhotosCollection

Value

A collection of photos in a FacebookPhotosCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields{id,source}.

Following the same philosophy, if you need only id and name for the from node you can use from.fields{id,name}.

Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookAlbumsCollection-class will build a collection with the photos that belong to the albums in the source collection.
- FacebookEventsCollection-class will build a collection with the photos shot at the events in the source collection.
- FacebookUsersCollection-class will build a collection with the photos that belong to the users in the source collection, assuming they have given the user_photos permission to the current application.
- FacebookPagesCollection-class will build a collection with the photos uploaded by the pages in the source collection. By default, the picture profile is returned, unless you specify the type=uploaded or the type=tagged parameters.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

FacebookAlbumsCollection, fbOAuth

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                      "NathanNeverSergioBonelliEditore"),
```

FacebookPhotosCollection-class

Class for representing a collection of Facebook photos

Description

This class is used to collect Facebook photos in a convenient structure.

Use the FacebookPhotosCollection constructor for building an instance of this class, as it provides better sanity and validation checks.

Slots

data  The raw data in a list form and as pulled from Facebook

id  A character vector with the id of the items included in the collection

fields  A character vector with the fields included for each ID in the collection. I.e. id, name, created_time...

token  Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth used to fill the collection.

parent  A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance

parent.collection  The collection used to build this one, or NA if the collection was built from a character vectors of ids.

type  A character vector with the type of each element of the collection. It's set only if the collection has been built with metadata=TRUE

Author(s)

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See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPagesCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class, FacebookVideosCollection-class
FacebookPostsCollection

Build a collection of Facebook posts

Description
Connect to Facebook Graph API, get information from a list of public Facebook posts and build a FacebookPostsCollection-class instance.

Usage
FacebookPostsCollection(id, token = NULL, parameters = list(),
fields = c("id", "from.fields(id,name)", "message", "created_time", "type",
"link", "name"), feed = TRUE, n = getOption("facebook.maxitems"),
metadata = FALSE, .progress = create_progress_bar())

Arguments
id A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).
token Either a temporary access token created at https://developers.facebook.
com/tools/explorer or the OAuth token created with fboauth. If token NULL
and id is a collection, use the token of the source collection. Otherwise, no
query is performed to the Facebook Graph API and an empty collection is re-
turned.
parameters A list of parameters to be added to the Facebook Graph API query. For more in-
fpiration on the accepted parameters, see: https://developers.facebook.
com/docs/graph-api/using-graph-api.
fields A character vector with the fields to get for each id. If no value for a given field
is found, it will be set to NULL.
feed If id is a collection and feed is set to TRUE, the collection will also include posts
written by others (not only by the owner of the collection items themselves). If
id is not a collection or it is a FacebookGroupsCollection-class, the param-
eter is ignored.
n If id is an iterable collection, then n is the maximum number of posts to be
pulled for each element of the source collection in id. It can be set to Inf to pull
out any available public post and assumes the default value from the value of
facebook.maxitems global option if missing. If id is not a collection or cannot
be iterated, the parameter is ignored.
metadata If set to TRUE, the metadata for each ID is pulled with the data and the type slot
is fed accordingly. Please note that setting this to TRUE could considerably slow
down the execution time, as more queries are needed.
.progress progress_bar object as defined in the plyr package. By default the none progress
bar is used, which prints nothing to the console. See create_progress_bar for
details.
**FacebookPostsCollection**

**Details**

FacebookPostsCollection is the constructor for the FacebookPostsCollection-class. It returns data about posts but doesn't return lists of comments or likes, although it does return an approximate total count for both (depending on privacy settings of the users).

**Value**

A collection of posts in a FacebookPostsCollection-class object.

**Nesting fields**

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id,source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id,name).

**Valid sources**

Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookPostsCollection-class will build a collection with the shared posts from the posts of the source collection. It assumes the authors of the shared posts have granted the user_posts permission to the current application.
- FacebookVideosCollection-class will build a collection with the shared posts from the videos of the source collection. It assumes the authors of the shared posts have granted the user_posts permission to the current application.
- FacebookPagesCollection-class will build a collection with the posts written on the pages in the source collection.
- FacebookUsersCollection-class will build a collection with the posts written on the pages of the users in the source collection. Users must have granted the user_posts permission to the current application to perform this action.
- FacebookGroupsCollection-class will build a collection with the posts written on the walls of the groups in the source collection. Users must have granted the user_managed_groups permission to the current application to be able to perform this action.

**Author(s)**

Gabriele Baldassarre https://gabriellebaldassarre.com

**See Also**

FacebookPagesCollection, FacebookCommentsCollection, fbOauth

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookReactionsCollection, FacebookUsersCollection, FacebookVideosCollection
Examples

## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                          "NathanNeverSergioBonelliEditore"),
                                         token = fb_oauth)

## Pull the latest 10 posts from each page
fb.posts <- FacebookPostsCollection(id = fb.pages, token = fb_oauth, n = 10)

## Pull all the available posts from each page
fb.posts.inf <- FacebookPostsCollection(id = fb.pages, token = fb_oauth, n = Inf)

## Convert the collection to a data frame
fb.posts.df <- as.data.frame(fb.posts)

# The same as before in a more compact fashion using the pipe operator
# chaining from a Pages Collection
fb.posts.pipe <- FacebookPagesCollection(id = c("9thcirclegames",
                                              "NathanNeverSergioBonelliEditore"),
                                              token = fb_oauth) %>% FacebookPostsCollection(n = 10)

## Build a collection of sharedposts from a posts collection
fb.sharedposts <- FacebookPostsCollection(id = fb.posts, token = fb_oauth, n = Inf)

## End(Not run)

---

FacebookPostsCollection-class

Class for representing a collection of Facebook posts

Description

This class is used to collect Facebook posts in a convenient structure.
Use the FacebookPostsCollection constructor for building a instance of this class, as it provides better sanity and validation checks.

Slots

- **data** The raw data in a list form and as pulled from Facebook
- **id** A character vector with the id of the items included in the collection
- **fields** A character vector with the fields included for each ID in the collection. I.e. id, name, created_time...
- **token** Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth used to fill the collection.
FacebookReactionsCollection

Build a collection of Facebook reactions to posts and comments

Description

Connect to Facebook Graph API, get information from a list of reactions to public posts or comments and build a FacebookReactionsCollection-class instance.

Usage

FacebookReactionsCollection(id, token = NULL, parameters = list(),
                        fields = c("id", "name", "type", "profile_type"),
                        n =getOption("facebook.maxitems"), metadata = FALSE,
                        .progress = create_progress_bar())

Arguments

id A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).

token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fb0Auth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.

parameters A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.
fields
A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.

n
If id is an iterable collection, then n is the maximum number of reaction to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available public reaction and assumes the default value from the value of facebook\_maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.

metadata
If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.

.progress
progress\_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create\_progress\_bar for details.

Details
FacebookReactionsCollection is the constructor for the FacebookReactionsCollection-class. It returns data about reactions to posts or comments but doesn’t return the comments or posts themselves.

Since Facebook doesn’t provide a key for a single reaction, the ID slot for this kind of collection doesn’t uniquely identify a reaction on Facebook. The id (the user who expressed the reaction) coupled with the parent (the place where she put the like) identifies a unique key for the reaction.

As a consequence, you cannot build a reactions collection starting from atomic IDs, but you must pass an instance of a Facebook Posts Collection or a Facebook Comments Collection built using the construction FacebookPostsCollection or FacebookCommentsCollection as id parameter.

Value
A collection of reactions in a FacebookReactionsCollection-class object.

Nesting fields
Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id,source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id,name).

Valid sources
Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookPostsCollection-class will build a collection with all the likes to the posts of the source collection
- FacebookCommentsCollection-class will build a collection with all the likes to the comments of the source collection
FacebookReactionsCollection will build a collection with the posts written on the walls of the users in the source collection.

FacebookPhotosCollection will build a collection with the likes to the photos in the source collection. The author of the photo may grant the user_photos to the current application to perform this action.

FacebookVideosCollection will build a collection with the likes to the videos in the source collection. The author of the photo may grant the user_videos to the current application to perform this action.

Author(s)
Gabriele Baldassarre https://gabrielebaldassarre.com

See Also
FacebookCommentsCollection, FacebookPostsCollection, FacebookLikesCollection, facebook.object_likes, fbOauth

Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPostsCollection, FacebookUsersCollection, FacebookVideosCollection

Examples

```r
# Not run:
# See examples for fbOauth to know how token was created.
load("fb_oauth")

# Getting information about two example Facebook Pages
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                         "NathanNeverSergioBonelliEditore"),
                                         token = fb_oauth)

# Pull the latest 10 posts from each page in a pages collection
fb.posts <- FacebookPostscollection(id = fb.pages, token = fb_oauth, n = 10)

# Pull all the reactions from each element of the posts collection
fb.posts.reactions <- FacebookReactionssCollection(fb.posts, fb_token, n = Inf)

# Pull all the available comments from each post of the post collection
fb.comments <- FacebookPostscollection(id = fb.posts, token = fb_oauth, n = Inf)

# Pull all the likes from each element of the comments collections
fb.comments.reactions <- FacebookReactionsCollection(id = fb.comments, token = fb_oauth, n = Inf)

# Convert the collection to a data frame
fb.posts.reactions.df <- as.data.frame(fb.posts.reactions)

# The same as before in a more compact fashion using the pipe operator
# chaining from a Pages then to a Posts Collection and finally building a Likes Collection
```
FacebookReactionsCollection-class

Class for representing a Collection of Facebook reactions

Description

This class is used to collect Facebook reactions in a convenient structure.

Use the `FacebookReactionsCollection` constructor for building a instance of this class, as it provides better sanity and validation checks.

Slots

data  The raw data in a list form and as pulled from Facebook
id   A character vector with the id of the items included in the collection
fields  A character vector with the fields included for each ID in the collection. I.e. id, name, created_time...
token  Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboauth used to fill the collection.
parent  A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance
parent.collection  The collection used to build this one, or NA if the collection was built from a character vectors of ids.
type  A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookVideosCollection-class
FacebookUsersCollection

Build a collection of Facebook users

Description

Connect to Facebook Graph API, get public information from a list of Facebook users and build a FacebookUsersCollection-class instance.

Usage

FacebookUsersCollection(id, token = NULL, parameters = list(), fields = c("id", "name", "first_name", "last_name", "gender", "locale", "picture.fields(url).type(large)"), n = getOption("facebook.maxitems"), metadata = FALSE, .progress = create_progress_bar())

Arguments

id A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).
token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.
parameters A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.
fields A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.
n If id is an iterable collection, then n is the maximum number of users to be pulled for each element of the source collection in id. It can be set to Inf to pull out any accessible user and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.
metadata If set to TRUE, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to TRUE could considerably slow down the execution time, as more queries are needed.
.progress progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See create_progress_bar for details.
Details

FacebookUsersCollection is the constructor for the FacebookUsersCollection-class. It returns data about users.

After version 2.0 of the Facebook API, only id, name, and picture are available through the API as public informations. All the remaining fields will be missing unless the Application asks for specific permissions.

Value

A collection of users in a FacebookUsersCollection-class object.

Nesting fields

Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting .fields() clauses.

For example, if you need only id and source for the cover field, this is valid among others: cover.fields(id,source).

Following the same philosophy, if you need only id and name for the from node you can use from.fields(id,name).

Valid sources

Instead of a character vector, one of these collections can also be passed as parameter in id:

- FacebookUsersCollection-class will build a collection with the friends of the users of the source collection. It assumes these users have granted the user_friends permission to the current application.
- FacebookPostsCollection-class will build a collection from the authors of the posts of the source collection.
- FacebookCommentsCollection-class will build a collection from the authors of the comments of the source collection.
- FacebookLikesCollection-class will build a collection from the authors of the likes of the source collection.
- FacebookUsersCollection-class will build a collection with the posts written on the walls of the users in the source collection.
- FacebookGroupsCollection-class will build a collection with the members of the groups in the source collection.
- FacebookMixedCollection-class will build a collection with only the user elements of the source collection.

Be careful when binding this kind of collection starting from a FacebookPostsCollection, FacebookCommentsCollection or a FacebookLikesCollection.

In Facebook, one can publish, comment or like acting as a user or as a page. But since users and pages have different sets of fields and you won’t know in advance if the author is a page or not, the constructor of this collection would fail due to inconsistent fields.
To avoid this, if `id` is an instance of one of the aforementioned collections, a serialization query is performed before to eventually filter out the pages and retain only the users. Finally, the real collection is built on this valid subset of user IDs only. This requires more queries and, usually, more time.

**Author(s)**

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**See Also**

- FacebookPostsCollection, FacebookCommentsCollection, FacebookLikesCollection, facebook.search
- Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookVideosCollection

**Examples**

```
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Getting information about 9th Circle Games' Facebook Page
fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                  "NathanNeverSergioBonelliEditore"),
                  token = fb_oauth)

## Getting the commenters of the latest 10 posts
fb.comments <- fb.pages %>% FacebookPostsCollection(n = 10) %>%
  FacebookCommentsCollection(fields=c("id",
                  "from.fields(id,name)"),
                  n = Inf)

## Build a collection of users from who actually commented those posts
fb.commenting.users <- fb.comments %>% FacebookUsersCollection()

## Convert the collection to a data frame
fb.commenting.df <- as.data.frame(fb.commenting.users)

## End(Not run)
```
Description

This class is used to collect Facebook pages in a convenient structure.

Use the FacebookUsersCollection constructor for building an instance of this class, as it provides better sanity and validation checks.

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

FacebookVideosCollection

Build a collection of Facebook videos to posts

Description

Connect to Facebook Graph API, get information from a list of Facebook videos to posts and build a FacebookPostsCollection-class instance.

Usage

FacebookVideosCollection(id, token = NULL, parameters = list(), fields = c("id", "from.fields(id,name)", "source", "length", "content_category", "created_time"), n = getOption("facebook.maxitems"), metadata = FALSE, .progress = create_progress_bar())

Arguments

id A character vector or a comma-delimited string of IDs or an existing Facebook Collection of any of the supported types (see below).

token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fbOAuth. If token NULL and id is a collection, use the token of the source collection. Otherwise, no query is performed to the Facebook Graph API and an empty collection is returned.

parameters A list of parameters to be added to the Facebook Graph API query. For more information on the accepted parameters, see: https://developers.facebook.com/docs/graph-api/using-graph-api.

fields A character vector with the fields to get for each id. If no value for a given field is found, it will be set to NULL.

n If id is an iterable collection, then n is the maximum number of videos to be pulled for each element of the source collection in id. It can be set to Inf to pull out any available video and assumes the default value from the value of facebook.maxitems global option if missing. If id is not a collection or cannot be iterated, the parameter is ignored.
metadata
If set to `TRUE`, the metadata for each ID is pulled with the data and the type slot is fed accordingly. Please note that setting this to `TRUE` could considerably slow down the execution time, as more queries are needed.

.progress
progress_bar object as defined in the plyr package. By default the none progress bar is used, which prints nothing to the console. See `create_progress_bar` for details.

Details
FacebookVideosCollection is the constructor for the `FacebookVideosCollection-class`. It returns metadata about videos but doesn’t return the raw image nor the various image formats available.

Value
A collection of videos in a `FacebookVideosCollection-class` object.

Nesting fields
Due to the network-graph nature of Facebook data model, you can specify fields details for each field nesting `fields()` clauses.

For example, if you need only `id` and `source` for the `cover` field, this is valid among others: `cover.fields(id, source)`.

Following the same philosophy, if you need only `id` and `name` for the `from` node you can use `from.fields(id, name)`.

Valid sources
Instead of a character vector, one of these collections can also be passed as parameter in `id`:

- `FacebookUsersCollection-class` will build a collection with the videos that belong to the users in the source collection, assuming they have given the `user_videos` or the `user_posts` permission to the current application.
- `FacebookPagesCollection-class` will build a collection with the videos uploaded by the pages in the source collection.
- `FacebookEventsCollection-class` will build a collection with the videos took at the events in the source collection.

Author(s)
Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

See Also
FacebookAlbumsCollection, fbOAuth
Other Facebook Collection Constructors: FacebookAlbumsCollection, FacebookCommentsCollection, FacebookConversationsCollection, FacebookEventsCollection, FacebookGroupsCollection, FacebookLikesCollection, FacebookMessagesCollection, FacebookPagesCollection, FacebookPhotosCollection, FacebookPostsCollection, FacebookReactionsCollection, FacebookUsersCollection
FacebookVideosCollection-class

Class for representing a collection of Facebook videos

Description

This class is used to collect Facebook videos in a convenient structure.

Use the FacebookVideosCollection constructor for building a instance of this class, as it provides better sanity and validation checks.

Slots

data  The raw data in a list form and as pulled from Facebook
id   A character vector with the id of the items included in the collection
fields A character vector with the fields included for each ID in the collection. Ie. id, name, created_time...
token Either a temporary access token created at https://developers.facebook.com/tools/explorer or the OAuth token created with fboAuth used to fill the collection.
parent A character vector of the parent id of the items included in the collection or NA if the items have no valid inheritance
parent.collection The collection used to build this one, or NA if the collection was built from a character vectors of ids.
type   A character vector with the type of each element of the collection. It’s set only if the collection has been built with metadata=TRUE

Author(s)

Gabriele Baldassarre https://gabrielebaldassarre.com

See Also

Other Facebook Collections: FacebookAlbumsCollection-class, FacebookCommentsCollection-class, FacebookConversationsCollection-class, FacebookEventsCollection-class, FacebookGenericCollection-class, FacebookGroupsCollection-class, FacebookLikesCollection-class, FacebookMessagesCollection-class, FacebookMixedCollection-class, FacebookPagesCollection-class, FacebookPhotosCollection-class, FacebookPostsCollection-class, FacebookReactionsCollection-class
fbOAuth

Create OAuth token to Facebook R session

Description

fbOAuth creates a long-lived OAuth access token that enables R to make authenticated calls to the Facebook API. The token can be saved as a file in disk to be re-used in future sessions. This function relies on the httr package to create the OAuth token, and is a simplified version of one of its examples.

This function will automatically detect the API version for the token you create.

Usage

fbOAuth(app_id, app_secret, permissions = "public_profile,user_friends", cache = TRUE)

Arguments

app_id numeric, App ID of application to be used to create OAuth token. Available at https://developers.facebook.com/apps

app_secret string, App Secret of application to be used to create OAuth token. Available at https://developers.facebook.com/apps, in Basic Settings panel.

permissions A character vector with a list of the permissions to grant to the application. After version 2.0 of the Graph API, creating an application with extended permissions requires passing App Review (https://developers.facebook.com/docs/facebook-loginreview)

cache If set to TRUE a file with the authentication details for the current user is saved to disk as .http-oauth, so it won’t be asked to authenticate through the browser anymore.

Details

There are two different ways of making authenticated requests. One is to obtain a temporary access token from https://developers.facebook.com/tools/explorer/, which can be used as argument in any of the functions in Rfacebook. An example is shown below.

However, this token has a 2-hour lifetime by default and after it expires, it needs to be renewed. The second alternative is to create an OAuth token. The process to create it is a bit more tedious. It is divided in three steps.

First, go to https://developers.facebook.com/apps, register as a developer and create a new app. You will also need a verified Facebook account. After that, click in "Show" under "App Secret" to find your 'App ID' and 'App Secret'.

Second, run the fbOAuth function with your "App ID" and "App Secret" as arguments.

Third, after pressing Enter, R will try to open a browser window to sign the token. If everything works well, you will get a message that says you can return to R. If not, try again in a few minutes to make sure your application had its settings updated properly.
If you set `cache=TRUE`, a file `.httr-oauth` is then saved in your home directory. This file caches the OAuth credentials so you don’t need to perform the browser authentication a second time if you don’t change the App ID, the App Secret or the permissions you grant.

**Author(s)**

Pablo Barbera <pablo.barbera@nyu.edu>, Gabriele Baldassarre [https://gabrielebaldassarre.com](https://gabrielebaldassarre.com)

**See Also**

`facebook.search`, `FacebookPagesCollection`, `FacebookPostsCollection`

**Examples**

```r
## Not run:
## See examples for fbOAuth to know how token was created.
load("fb_oauth")

me <- FacebookUsersCollection("me", token=fb_oauth)
as.data.frame(me)

## an example of a request using a temporary access token
token <- "XXXXXXXXXXXXXXXX1111"
me <- FacebookUsersCollection("me", token=token)

## End(Not run)
```

---

**formatFbDate**  
*Convert a Facebook datet ime string into a valid R datetime*

**Description**

`facebook.formatFbDate` converts the date-time string returned by Facebook in a valid POSIX format.

**Usage**

`formatFbDate(datestring, format = "datetime")`

**Arguments**

- `datestring` The date to convert in the character format used by Facebook.
- `format` Set to "datetime" to convert into a POSIX value or "date" to convert into a Date. Any other values will make the function returns NULL.

**Author(s)**

Pablo Barbera <pablo.barbera@nyu.edu>
**length,FacebookGenericCollection-method**

_Return the number of items in a given Facebook collection_

**Description**

This method returns the number of members in a given Facebook collection.

**Usage**

```r
## S4 method for signature 'FacebookGenericCollection'
length(x)
```

**Arguments**

- `x` a valid not-null Facebook collection

---

**summary,FacebookGenericCollection-method**

_Returns a summary of a Facebook collection_

**Description**

This generic returns a summarized version from various Facebook collections

**Usage**

```r
## S4 method for signature 'FacebookGenericCollection'
summary(object, ...)  
```

**Arguments**

- `object` A valid collection of Facebook elements
- `...` not used in this context
[,FacebookGenericCollection,ANY,ANY-method

Return parts of a Facebook collection

Description
This generic returns parts of a given Facebook collections

Usage

```r
## S4 method for signature 'FacebookGenericCollection,ANY,ANY'

x[i, j, drop]
```

Arguments

- `x` A valid collection of Facebook elements
- `i` slicing on the first dimension index
- `j` not used in this context
- `drop` not used in this context
- `...` not used in this context

Examples

```r
## Not run:

## See examples for fbOAuth to know how token was created.
load("fb_oauth")

## Getting information about two example Facebook Pages

fb.pages <- FacebookPagesCollection(id = c("9thcirclegames",
                                        "NathanNeverSergioBonelliEditore"),
                                        token = fb_oauth)

## Pull at most 20 albums from each page

fb.albums <- FacebookAlbumsCollection(id = fb.pages, token = fb_oauth, n = 20)

## Create a new collection skipping the first 10 albums

fb.oldest.albums <- fb.albums[11:length(fb.oldest.albums)]

## End(Not run)
```
Pipe an object forward into a function call/expression.

Description
Pipe an object forward into a function call/expression.

Usage
1hs %>% rhs

Arguments
1hs The value to be piped
rhs A function or expression

Source
This is just the imported function from the magrittr package. The documentation you should read for the %>% function can be found here: pipe
Adding the function in the package while importing it is a trick taken from the dplyr package (in the file chain.r)

See Also
pipe
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