Package ‘Rlinkedin’

October 30, 2016

Version 0.2

Title Access to the LinkedIn API via R

Description A series of functions that allow users to access the 'LinkedIn' API to get information about connections, search for people and jobs, share updates with their network, and create group discussions. For more information about using the API please visit <https://developer.linkedin.com/>.

Author Michael Piccirilli <michael.r.piccirilli@gmail.com>

Maintainer Michael Piccirilli <michael.r.piccirilli@gmail.com>

Depends R (>= 2.12.0), httr, XML, httpuv

Imports methods

License GPL-2

LazyData true

URL https://github.com/mpiccirilli/Rlinkedin

BugReports https://github.com/mpiccirilli/Rlinkedin/issues

RoxygenNote 5.0.1

NeedsCompilation no

Repository CRAN

Date/Publication 2016-10-30 08:58:23

R topics documented:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rlinkedin-package</td>
<td>2</td>
</tr>
<tr>
<td>getCompany</td>
<td>2</td>
</tr>
<tr>
<td>getGroupPosts</td>
<td>3</td>
</tr>
<tr>
<td>getGroups</td>
<td>4</td>
</tr>
<tr>
<td>getJobs</td>
<td>5</td>
</tr>
<tr>
<td>getMyConnections</td>
<td>6</td>
</tr>
<tr>
<td>getProfile</td>
<td>7</td>
</tr>
<tr>
<td>inOAuth</td>
<td>8</td>
</tr>
</tbody>
</table>
Description

This is an R package that provides a series of functions that allow users to access the LinkedIn API to get information about connections, search for people, search for jobs, share updates with your network, and create group discussions.

Author(s)

Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also

`inOAuth`, `getProfile`, `getMyConnections`, `getGroupPosts`, `getGroups`, `getJobs`, `searchJobs`, `searchPeople`, `submitGroupPost`, `submitShare`, `getCompany`, `searchCompanies`

---

getCompany

Retrieves Company Profile Information

Description

getCompany retrieves company profiles using a company Id, a universal name, or an email domain.

Usage

```r
getCompany(token, universal_name = NULL, email_domain = NULL, company_id = NULL, partner = 0)
```

Arguments

token

Authorization token.

universal_name

LinkedIn universal company name. This is the exact name seen at the end of the URL on the company page on linkedin.com.

e-mail_domain

The email domain used by the company.

company_id

LinkedIn company ID.

partner

Indicate whether you belong to the Partnership Program. Values: 0 or 1
getGroupPosts

Details

The ‘universal name’ needs to be the exact name seen at the end of the URL on the company page on linkedin.com.

Value

Returns company profile data, such as LinkedIn ID, name, universal-name, email-domains, company-type, ticker, website-url, industries, status, twitter handle, employee-count-range, specialties, locations, description, founded-year, and number of followers.

The output when specifying the universal_name or company_id will be in a list, whereas the output when specifying the email_domain will be a dataframe.

Author(s)

Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also

searchCompanies

Examples

## Not run:

```r
company.name <- getCompany(token=in.auth, universal_name="Facebook")
company.email <- getCompany(token=in.auth, email_domain = "columbia.edu")

# Main Columbia Name:
company.id <- getCompany(token=in.auth, company_id = company.email$company_id[14])
```

## End(Not run)

---

getGroupPosts  Extract Posts from your LinkedIn Groups

Description

getGroupPosts will retrieve posts from each LinkedIn group you belong to.

Usage

getGroupPosts(token, partner = 0)

Arguments

token  Authorization token.

partner  Indicate whether you belong to the Partnership Program. Values: 0 or 1
getGroups

Description
getGroups retrieves information and settings about the LinkedIn groups you belong to.

Usage
groups(token, details = FALSE, partner = 0)

Arguments
token
Authorization token.
details
TRUE or FALSE. If TRUE, it will return group details. FALSE is default.
partner
Indicate whether you belong to the Partnership Program. Values: 0 or 1

Details
This function returns information about what groups you belong to, either with or without group details. Group details can be called by setting the option details = TRUE.

Value
Returns a dataframe including group profile information.
When details = FALSE (default), the function will return information about each group’s settings such as whether it allows messages from members, email frequency, and manager announcements.
When details = TRUE, the function will return both a short and long description of the group.

Author(s)
Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also
groups submitGroupPost

Examples
## Not run:
my.groups <- getGroupPosts(in.auth)
## End(Not run)
getJobs

Author(s)
Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also
getGroupPosts submitGroupPost

Examples

```r
## Not run:
my.groups <- getGroups(token = in.auth, details=TRUE)
## End(Not run)
```

---

getJobs  

**Bookmarked and Recommended Jobs on LinkedIn**

Description
getJobs can be used to retrieve your bookmarked and suggested jobs.

Usage

```r
getJobs(token, suggestions = NULL, bookmarks = NULL, partner = 0)
```

Arguments

token  
Authorization token.
suggestions  
TRUE or FALSE. If TRUE, it will return LinkedIn’s job recommendations.
bookmarks  
TRUE or FALSE. If TRUE, it will return jobs you’ve bookmarked on LinkedIn.
partner  
Indicate whether you belong to the Partnership Program. Values: 0 or 1

Details
This function can return either jobs you’ve bookmarked on LinkedIn, or jobs LinkedIn is recommending for you, but not both at the same time.

Value
Returns a dataframe of recommended or bookmarked jobs.

Author(s)
Michael Piccirilli <michael.r.piccirilli@gmail.com>
getMyConnections

See Also

searchJobs

Examples

## Not run:

```r
job.suggestions <- getJobs(in.auth, suggestions=TRUE)
job.bookmarks <- getJobs(in.auth, bookmarks=TRUE)

## Will return NULL
job.fail <- getJobs(in.auth)
```

## End(Not run)

---

**getMyConnections**

*Retrieve 1st Degree LinkedIn Connections*

**Description**

getMyConnections returns information about your 1st degree connections who do not have their profile set to private.

You cannot "browse connections." That is, you cannot get connections of your connections (2nd degree connections).

**Usage**

```r
getMyConnections(token, partner = 0)
```

**Arguments**

- `token` Authorization token.
- `partner` Indicate whether you belong to the Partnership Program. Values: 0 or 1

**Value**

Returns a dataframe of your 1st degree LinkedIn connections.

**Author(s)**

Michael Piccirilli <michael.r.piccirilli@gmail.com>

**See Also**

`getProfile, searchPeople`
getProfile

Examples

## Not run:

```r
my.connections <- getMyConnections(in.auth)
```

## End(Not run)

---

**getProfile**  
*Extract LinkedIn Profile Information*

**Description**

getProfile retrieve’s profile information about yourself, your connections, or another individual.

**Usage**

getProfile(token, connections = FALSE, id = NULL, partner = 0)

**Arguments**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>token</td>
<td>Authorization token.</td>
</tr>
<tr>
<td>connections</td>
<td>TRUE or FALSE. If TRUE, will return profile information of your connections. FALSE is default.</td>
</tr>
<tr>
<td>id</td>
<td>Numeric ID number of a LinkedIn member.</td>
</tr>
<tr>
<td>partner</td>
<td>Indicate whether you belong to the Partnership Program. Values: 0 or 1</td>
</tr>
</tbody>
</table>

**Details**

There are three separate calls in getProfile.

The first is to return profile information about yourself. The only input into the function under this scenario is the token.

The second is to return profile information about all your 1st degree connections. You need to supply the token and set the connections = TRUE.

The third is to return profile information about an individual based on their id number. This can be found if you search your connections using the getMyConnections function.

**Value**

Returns a list of profile information.

**Author(s)**

Michael Piccirilli <michael.r.piccirilli@gmail.com>
See Also

searchPeople, getMyConnections

Examples

```r
## Not run:

profiles <- getProfile(in.auth, connections=TRUE)

## End(Not run)
```

## inOAuth

Create OAuth token to LinkedIn R session

### Description

inOAuth creates a long-lived OAuth access token that enables R to make authenticated calls to the LinkedIn API. This function relies on the `httr` package to create the OAuth token.

### Usage

```r
inOAuth(application_name = NULL, consumer_key = NULL, consumer_secret = NULL)
```

### Arguments

- `application_name`
  - Name of your application.
- `consumer_key`
  - Consumer API Key of your application.
- `consumer_secret`
  - Consumer Secret Key of your application.

### Details

There are two ways to create an authenticated connection. One is to use the default credentials supplied in the package. The second is to obtain your own credentials and using them as inputs into the function. Examples of both are shown below.

Create your own application here: [https://developer.linkedin.com/](https://developer.linkedin.com/)

### Value

Authorization token to be used in other functions.

### Author(s)

Michael Piccirilli <michael.r.piccirilli@gmail.com>
searchCompanies

See Also

getProfile, getMyConnections

Examples

## Not run:

```
## Default Consumer and Secret Key for the Rlinkedin package:
in.auth <- inOAuth()

## Use your own Consumer and Secret Key:
in.auth <- inOAuth("your_app_name", "your_consumer_key", "your_consumer_secret")

## End(Not run)
```

## searchCompanies

`searchcompanies` searches across LinkedIn’s companies pages based on keywords, location, and industry.

### Usage

`searchCompanies(token, keywords, location = NULL, industry = NULL)`

### Arguments

- **token**
  - Authorization token.

- **keywords**
  - A keyword used anywhere in a company’s listing. Multiple words should be separated by a space.

- **location**

- **industry**

### Details

In order to narrow the search down by location or industry, you must look up the proper input codes on the linkedin website. The geography codes can be found here: [https://developer.linkedin.com/docs/reference/geography-codes](https://developer.linkedin.com/docs/reference/geography-codes), and the industry codes can be found here: [https://developer.linkedin.com/docs/reference/industry-codes](https://developer.linkedin.com/docs/reference/industry-codes).

### Value

Returns a list, information includes company id, company name, universal name, website, twitter handle, employee count, founded date, number of followers, and company description.
searchJobs

Author(s)
Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also
getCompany searchJobs

Examples

```r
## Not run:

search.comp <- searchCompanies(in.auth, keywords = "LinkedIn")

## End(Not run)
```

searchJobs  

Description

searchJobs searches across LinkedIn’s job postings.

There are several parameters that allow you to conduct either a broad or focused search.

In order to use this function, you must create your own application and apply for the Vetted API Access here: https://help.linkedin.com/app/ask/path/api-dvr. You cannot use the default credentials supplied in the Rlinkedin package.

Usage

```r
searchJobs(token, keywords = NULL, company_name = NULL, job_title = NULL, 
          country_code = NULL, postal_code = NULL, distance = NULL, partner = 0)
```

Arguments

- `token`  
  Authorization token.
- `keywords`  
  A keyword used in the job title or description. Multiple words should be separated by a space.
- `company_name`  
  Company posting the job.
- `job_title`  
  Title of the job.
- `country_code`  
  Specify the country in which to search. This is the ISO3166 country code, and must be in lower case.
- `postal_code`  
  Must be combined with the `country_code` parameter.
- `distance`  
  Distance matches jobs within a distance from a central point. This is measured in miles and is best used in conjunction with both `country_code` and `postal_code`.
- `partner`  
  Indicate whether you belong to the Partnership Program. Values: 0 or 1
searchPeople

Details

There are many different search parameters that allow you to make a focused search of a particular job within a certain company some area of the country. Or you can search for all jobs posted based on general keywords.

Value

Returns a dataframe of jobs based input parameters

Author(s)

Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also

getJobs searchCompanies

Examples

```r
## Not run:
searchPeople(token = in.auth, keywords = "data scientist")
```

Usage

searchPeople(token, keywords = NULL, first_name = NULL, last_name = NULL, company_name = NULL, current_company = NULL, title = NULL, current_title = NULL, school_name = NULL, current_school = NULL, country_code = NULL, postal_code = NULL, distance = NULL, partner = 0)
Arguments

- **token**: Authorization token.
- **keywords**: A keyword used in a person’s profile. Multiple words should be separated by a space.
- **first_name**: Search by a user's first name.
- **last_name**: Search by a user's last name.
- **company_name**: The name of a company where someone has as worked.
- **current_company**: TRUE or FALSE, can only be used in conjunction with company_name.
- **title**: A job title someone has held.
- **current_title**: TRUE or FALSE, can only be used in conjunction with title.
- **school_name**: The name of a school someone has attended.
- **current_school**: TRUE or FALSE, can only be used in conjunction with current_school.
- **country_code**: Specify the country in which to search. This is the ISO3166 country code, and must be in lower case.
- **postal_code**: Must be combined with the country_code parameter.
- **distance**: Distance matches members within a distance from a central point. This is measured in miles and and is best used in conjunction with both country_code and postal_code.
- **partner**: Indicate whether you belong to the Partnership Program. Values: 0 or 1

Value

Returns a dataframe of people based input parameters

Author(s)

Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also

getProfile

Examples

```r
## Not run:

search.results <- searchPeople(token=in.auth, first_name="Michael", last_name="Piccirilli")

## End(Not run)```
submitGroupPost

Create a Group Discussion Post

Description

submitGroupPost will create a group discussion post in one of the groups you belong to, specified by a Group Id.

Usage

submitGroupPost(token, group_id, disc_title = NULL, disc_summary = NULL, content_title = NULL, content_url = NULL, content_img = NULL, content_desc = NULL, partner = 0)

Arguments

token Authorization token.
group_id Numeric Group ID.
disc_title Group discussion title, required.
disc_summary Group discussion summary, required.
content_title Title for content, required.
content_url Url for content, optional.
content_img Url for an image, optional.
content_desc Description of content, optional.
partner Indicate whether you belong to the Partnership Program. Values: 0 or 1

Details

You must include a minimum of a discussion title, discussion summary, and content title.

Value

There are two possible responses to a successful submittal.

One, your post has been created and is visible immediately. In this case you have most likely posted to an unmoderated group.

Two, your post has been accepted by the API but is pending approval by the group moderator, in which case you will not see your post until it has been approved.

Author(s)

Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also

groups getGroupPosts
Examples

```r
## Not run:

my.groups <- getGroups(in.auth)

id <- my.groups$group_id[1]
disc.title <- "Test connecting to the LinkedIn API via R"
disc.summary <- "I'm creating an R package to connect to the LinkedIn API,
+ this is a test post from R!"
url <- "https://github.com/npiccirilli"
content.desc <- "Dev version of access to LinkedIn API via R.
+ Collaboration is welcomed!"

submitGroupPost(in.auth, group_id=id, disc_title=disc.title,
    disc_summary=disc.summary, content_url=url, content_desc=content.desc)

## End(Not run)
```

---

**submitShare**

*Share an update to your network's activity feed*

**Description**

`submitShare` will post a network update to the newsfeed of your connections. You can select the visibility of your post to be seen either by 'anyone' or 'connections-only'.

**Usage**

```r
submitShare(token, comment = NULL, content_title = NULL,
    content_desc = NULL, content_url = NULL, content_img = NULL,
    visibility = "anyone")
```

**Arguments**

- **token**
  - Authorization token.
- **comment**
  - Headline of your post.
- **content_title**
  - Title of your post.
- **content_desc**
  - Description of your post.
- **content_url**
  - Url to content you’d like to share. This is required if you specify either content_title or content_desc.
- **content_img**
  - Url to an image you would like to include in your post, optional.
- **visibility**
  - Choose the visibility of the post. The choices are 'anyone' or 'connections-only'.
submitShare

Details

If either content_title or content_desc is specified, you must also include a content_url for the post.

Value

Shares an update to your network’s activity feed.

Author(s)

Michael Piccirilli <michael.r.piccirilli@gmail.com>

See Also

submitGroupPost

Examples

## Not run:

comment <- "Test connecting to the LinkedIn API via R"
title <- "I'm creating an R package to connect to the LinkedIn API, this is a test post from R!"
url <- "https://github.com/mpiccirilli"
desc <- "Dev version of access to LinkedIn API via R. Collaboration is welcomed!"

submitShare(token = in.auth, comment=comment, content_title=title,
content_url=url, content_desc=desc)

## End(Not run)
Index

getCompany, 2, 2, 10
getGroupPosts, 2, 3, 5, 13
getGroups, 2, 4, 4, 13
getJobs, 2, 5, 11
getMyConnections, 2, 6, 8, 9
getProfile, 2, 6, 7, 9, 12

inOAuth, 2, 8

Rlinkedin (Rlinkedin-package), 2
Rlinkedin-package, 2

searchCompanies, 2, 3, 9, 11
searchJobs, 2, 6, 10, 10
searchPeople, 2, 6, 8, 11
submitGroupPost, 2, 4, 5, 13, 15
submitShare, 2, 14