Package 'dimensionsR'

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Title Gathering Bibliographic Records from 'Digital Science Dimensions' Using 'DSL' API

Version 0.0.3

Description A set of tools to extract bibliographic content from 'Digital Science Dimensions' using 'DSL' API <https://www.dimensions.ai/dimensions-apis/>.

License GPL-3

URL https://github.com/massimoaria/dimensionsR

BugReports https://github.com/massimoaria/dimensionsR/issues

Encoding UTF-8

Imports httr, jsonlite

Suggests bibliometrix, knitr, rmarkdown

RoxygenNote 7.1.1

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

altmetric *Gather altmetric metadata from a DOI*

Description

It gathers altemtric metadata from a DOI using Altmetric API (www.altmetric.com). A single research output may live online in multiple websites and can be talked about across dozens of different platforms.

Altmetric is a search engine which collects and collates all of this disparate information to obtain an informative view of the online activity surrounding your scholarly content.

Usage

```
altmetric(doi = "10.1016/j.joi.2017.08.007")
```

Arguments

doi	is a character. It contains a list of DOIs. A DOI is a persistent identfier of a scholarly document.

Value

a data frame. Each row contains the full metadata record for each scholarly document.

For more extensive information about Altmetric, please visit: https://www.altmetric.com

Examples

```
## Not run:
doi = "10.1016/j.joi.2017.08.007"

df <- altmetric(doi = doi)

## End(Not run)
```

dsApi2df *Convert json dimensions bibliographic data into a dataframe*

Description

It converts dimensions data, downloaded using DSL API, into a dataframe

Usage

```
dsApi2df(P, format = "bibliometrix")
```

Arguments

P	is a list in json dimensions structure downloaded using the function dsApiRequest.
format	is a character. If format = "bibliometrix" data will be converted in the bibliometrix complatible data format. If format = "raw" data will save in a data frame without any other data editing procedure.

Value

a dataframe containing bibliographic records or grants information.

To obtain a free access to Dimenions API fro no commercial use, please visit: https://ds.digital-science.com/NoCostAgreement

For more extensive information about dimensions API, please visit: https://www.dimensions.ai/dimensions-apis/

For more extensive information about bibliometrix R packagee, please visit: https://www.bibliometrix.org

See Also

dsApiRequest

dsAuth

dsQueryBuild

Examples

```
# Example 1: Querying a collection of publications

## Not run:
token <- dsAuth(username = "my.email@my.domain", password = "mypassword")
query <- dsQueryBuild(item = "publications", words = "bibliometric*",
                      type = "article", categories = "management",
                      start_year=1980,end_year = 2020)
D <- dsApiRequest(token = token, query = query, limit = 50000)
M <- dsApi2df(D)

## End(Not run)

# Example 2: Querying a collection of grants

## Not run:
token <- dsAuth(username = "my.email@my.domain", password = "mypassword")
query <- dsQueryBuild(item = "grants", words = "bibliometric*",
                      type = "", categories = "management",
                      start_year=1980,end_year = 2020)
D <- dsApiRequest(token = token, query = query, limit = 50000)
M <- dsApi2df(D)

## End(Not run)
```

`dsApiRequest` *Gather bibliographic records using Digital Science Dimensions API*

Description

It gathers bibliographic records from Digigtal Science Dimensions. The function `dsApiRequest` queries Dimensions using a DSL query formulated through the function `dsQueryBuild`.

Usage

```
dsApiRequest(
  token,
  endpoint = "https://app.dimensions.ai/api/dsl.json",
  query,
  step = 100,
  limit = 50000,
  verbose = FALSE
)
```

Arguments

`token`	is a character. It contains a valid token to query Dimensions database through DSL API. The token can be obtain using the function `dsAuth` with valid credentials (account and password) .
`endpoint`	is a character. It contains the endpoint url of Dimensions API. Default is endpoint = "https://app.dimensions.ai/api/dsl.json".
`query`	is a character. It contains a search query formulated using the DSL API language. A query can be automatically generated using the function `dsQueryBuild`.
`step`	is integer. It indicates the number of records to download at each API request. Default is `step = 100`.
`limit`	is integer. It indicates the max number of records to download. limit cannot be higher than 50.000 (as stated by Dimensions rules).
`verbose`	is logical.

Value

a list cointaining bibliographic metadata downloaded from Dimensions.

To obtain a free access to Dimenions API for no commercial use, please visit: https://ds.digital-science.com/NoCostAgreement

For more extensive information about dimensions API, please visit: https://www.dimensions.ai/dimensions-apis/

See Also

dsQueryBuild

dsAuth

dsApi2df

Examples

```
## Not run:
token <- dsAuth(username = "my.email@my.domain", password = "mypassword")
query <- dsQueryBuild(item = "publications", words = "bibliometric*",
                      type = "article", categories = "management",
                      start_year=1980,end_year = 2020)
D <- dsApiRequest(token = token, query = query, limit = 50000)

## End(Not run)
```

---

dsAuth *Obtain an API token from dimensions.ai*

Description

It generates a token request to dimensions.ai using account and password.

Usage

```
dsAuth(
  username = NULL,
  password = NULL,
  key = NULL,
  auth_endpoint = "https://app.dimensions.ai/api/auth.json",
  verbose = FALSE
)
```

Arguments

username	is a character.
password	is a character.
key	is a character.
auth_endpoint	is a character. It contains the authentication endpoint url of Dimensions. Default is auth_endpoint = "https://app.dimensions.ai/api/auth.json"
verbose	is logical.

Value

a character cointaining an token o use dimensions API.

To obtain a free access to Dimenions API fro no commercial use, please visit: https://ds.digital-science.com/NoCostAgreement

For more extensive information about Dimensions API, please visit: https://www.dimensions.ai/dimensions-apis/

See Also

dsApiRequest

dsQueryBuild

dsApi2df

Examples

```
# Obtain a token by username and password
## Not run:
token <- dsAuth(username = "my.email@my.domain", password = "mypassword")

## End(Not run)

# Obtain a token by API Key

## Not run:
token <- dsAuth(key = "myapikey")

## End(Not run)
```

---

dsQueryBuild *Generate a DSL query from a set of parameters It generates a valid query, written following the Dimensions Search Language (DSL), from a set of search parameters.*

Description

Generate a DSL query from a set of parameters It generates a valid query, written following the Dimensions Search Language (DSL), from a set of search parameters.

Usage

```
dsQueryBuild(
  item = "publications",
  words = "bibliometric*",
  words_boolean_op = "OR",
  full.search = FALSE,
```

```
  type = "article",
  categories = "",
  output_fields = "all",
  start_year = NULL,
  end_year = NULL
)
```

Arguments

item	is a character. It indicates the type of document to search. The argument can be equal to item = ("publications", "grants", "patents", "clinical_trials", "policy_documents"). Default value is item = "publications".
words	is a character vector. It contains the search terms.
words_boolean_op	is character. It indicates which boolean operator have to be used to link words. It can be c("OR","AND"). Default is "OR".
full.search	is logical. If TRUE, full-text search finds all instances of a term (keyword) in a document, or group of documents. If False, the search finds all instances in titles and abstracts only.
type	is a character. It indicates the document type to include in the search. Default is type = "article".
categories	is a character vector. It indicates the research categories to include in the search. If empty categories = "", all categories will be included in the search.
output_fields	is a character vector. It contains a list of fields which have to exported. Default is "all".
start_year	is integer. It indicate the starting publication year of the search timespan.
end_year	is integer. It indicate the ending publication year of the search timespan.

Value

a character containing the query in DSL format.

For more extensive information about Dimensions Search Language (DSL), please visit: https://docs.dimensions.ai/dsl/

To obtain a free access to Dimenions API fro no commercial use, please visit: https://ds.digital-science.com/NoCostAgreement

See Also

dsApiRequest

dsAuth

dsApi2df

Examples

```
## Not run:
query <- dsQueryBuild(item = "publications", words = "bibliometric*",
```

```
                        type = "article", categories = "management",
                        start_year=1980,end_year = 2020)

## End(Not run)
```

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