Package ‘datagovindia’

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Title Data.gov.in API Wrapper
Version 1.0.5
Description This wrapper allows the user to communicate with more than 80,000 API posted on data.gov.in - open data platform of the government of India <https://data.gov.in/ogpl_apis>. It also allows the user to search for the API required through the universe of the API with a better interface than the one the official website provides. Once a user has the ID by using the API discovery functionalities, it allows one to converse with the API using a consistent format across all available API.
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URL https://github.com/econabhishek/datagovindia
BugReports https://github.com/econabhishek/datagovindia/issues
Imports curl, dplyr, httr, magrittr, plyr, stringr, rlang
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R topics documented:

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check_datagovin_server

Utility to check the server of data.gov.in APIs

Description

Utility to check the server of data.gov.in APIs

Usage

check_datagovin_server()

Value

Message

Examples

check_datagovin_server()
**check_internet_connection**

*Basic Utility to check internet connection*

**Description**

Basic Utility to check internet connection

**Usage**

```r
check_internet_connection()
```

**Value**

Message

**Examples**

```r
check_internet_connection()
```

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**get_api_data**

*Get data from API Index Name*

**Description**

Using the API index name you got from the API Search/Discovery functions or from the API list available on data.gov.in, get the data in a convenient way parsed into an R-friendly data frame.

**Usage**

```r
get_api_data(
    api_index, 
    results_per_req = "all", 
    filter_by = c(), 
    field_select = c(), 
    sort_by = c()
)
```

**Arguments**

- `api_index`  
  - Index name of the API
- `results_per_req`  
  - Integer number of results to get per request; "all" would get all the results
- `filter_by`  
  - A named character vector of field id (not the name) - value(s) pairs; can take multiple fields as well as multiple comma separated values
- `field_select`  
  - A character vector of fields required in the final data frame
- `sort_by`  
  - A character vector of fields to sort by in the final data frame
get_api_fields

Value

data.frame containing the queried data

Examples

```r
## Not run:
register_api_key("api_key")

request_data<-get_api_data(api_index="3b01bcb8-0b14-4abf-b6f2-c1bfd384ba69",
results_per_req=10,filter_by=c(state="Punjab,Haryana",
district="Amritsar,Ludhiana"),
field_select=c('state','district','city'),
sort_by=c('state','district','city'))

## End(Not run)
```

---

**get_api_fields**

*Get fields contained in the response of the API using the API index name*

**Description**

Get fields contained in the response of the API using the API index name

**Usage**

```r
get_api_fields(api_index)
```

**Arguments**

```r
api_index  API index name you found using the search functions. You can also get these
            from data.gov.in from a specific API page. In the request URL, it is followed by
            /resource/xxxxxxxx For getting the relevant fields in the API use get_api_fields
```

**Value**

data.frame with 1 row , API that matches API ID : contains ID, name and type of the field - name
            and type are usually the same; but we recommend using ID for queries.

**Examples**

```r
get_api_fields("3b01bcb8-0b14-4abf-b6f2-c1bfd384ba69")
```
get_api_info

Get information about the API using the API index name

Description

Get information about the API using the API index name

Usage

get_api_info(api_index)

Arguments

api_index API index name (string) you found using the search functions. You can also get these from data.gov.in from a specific API page. In the request URL, it is followed by /resource/xxxxxxx. For getting the relevant fields in the API use get_api_fields.

Value

data.frame with 1 row, API that matches API ID

Examples

get_api_info("3b01bcb8-0b14-4abf-b6f2-c1bdf384ba69")

get_list_of_organizations

Get a list of unique organizations

Description

These include which ministry releases the underlying data. This will be helpful while querying for the right API. Get a list of unique sectors.

Usage

get_list_of_organizations()

Value

character vector of organization

Examples

get_list_of_organizations()
get_list_of_org_types  *Get a list of unique organization types*

**Description**

These include whether a Central/State organization releases the underlying data. This will be helpful while querying for the right API.

**Usage**

```r
get_list_of_org_types()
```

**Value**

character vector of organization types

**Examples**

```r
get_list_of_org_types()
```

get_list_of_sectors  *Get a list of unique sectors*

**Description**

These include which sector the underlying data belongs to. This will be helpful while querying for the right API.

**Usage**

```r
get_list_of_sectors()
```

**Value**

character vector of sectors

**Examples**

```r
get_list_of_sectors()
```
get_list_of_sources

*Get a list of unique data sources (website names)*

**Description**

These include which websites host the underlying data. This will be helpful while querying for the right API.

**Usage**

```r
get_list_of_sources()
```

**Value**

character vector of sectors

**Examples**

```r
get_list_of_sources()
```

get_recently_created_api

*Get a data.frame of recently created APIs*

**Description**

This will return a data.frame of recently created APIs

**Usage**

```r
get_recently_created_api(N = 20)
```

**Arguments**

- `N` Number of APIs to return

**Value**

Get data.frame of N most recently created API sorted by date of creation

**Examples**

```r
recently_created_api<-get_recently_updated_api()
```
get_recently_updated_api

Get a data.frame of recently updated APIs

Description
This will return a data.frame of recently updated APIs

Usage
get_recently_updated_api(N = 20)

Arguments
N Number of APIs to return

Value
Get data.frame of N most recently updated API sorted by date of update

Examples
recently_updated_api<-get_recently_updated_api()

import_api_details
Utility to import RDS files with API details from Github

Description
Utility to import RDS files with API details from Github

Usage
import_api_details()

Value
file (data.frame)

Examples
api_details<-import_api_details()
**import_field_details**  
Utility to import updated RDS files with API field details from Github

**Description**  
Utility to import updated RDS files with API field details from Github

**Usage**  
import_field_details()

**Value**  
file (data.frame)

**Examples**  
api_field_details<-import_field_details()

**read_rds_from_github**  
Utility to import RDS files from Github

**Description**  
Utility to import RDS files from Github

**Usage**  
read_rds_from_github(url)

**Arguments**  
url URL of the raw github file

**Value**  
file (data frame)

**Examples**  
## Not run:  
read_rds_from_github(url)  
## End(Not run)
register_api_key  
Registering/Validating User API key

Description

Obtain an API key from data.gov.in by registering on the platform. You can find it on your "My Account" page after logging in. Here is the official guide for your reference [https://data.gov.in/help/how-use-datasets-apis](https://data.gov.in/help/how-use-datasets-apis)

Usage

```r
register_api_key(user_api_key, show_key = TRUE)
```

Arguments

- `user_api_key`: API Key obtained from data.gov.in
- `show_key`: Whether to API show key in messages

Value

Success/Failure of API key validation

Examples

```r
## Not run:
register_api_key(api_key=xxx,show_key=FALSE)
## End(Not run)
```

search_api_by_created_date

Search API by Created Date

Description

Returns APIs which were created on a specific date. This function takes in a Date object as its input. Use ymd/mdy/dmy functions from the package lubridate to make this easier.

Usage

```r
search_api_by_created_date(date = Sys.Date())
```

Arguments

- `date`: A Date object corresponding to chosen date of creation
search_api_by_description

Value

data.frame of API details filtered by date of creation

Examples

filtered_api<-search_api_by_created_date(date=as.Date("2021-12-20"))

search_api_by_description

Search API by description

Description

Search API by description

Usage

search_api_by_description(description_contains = "")

Arguments

description_contains

string to match in the description of the API (case insensitive)

Value

data.frame of API details filtered by descriptions that match the string provided

Examples

filtered_api<-search_api_by_description(description_contains="Air Quality")

search_api_by_organization

Search API by organization name

Description

Search API by organization name

Usage

search_api_by_organization(organization_name_contains = "")
search_api_by_org_type

Arguments

organization_name_contains
string to match in the organization type of the API (case insensitive)

Value

data.frame of API details filtered by organization names (Ministries) that match the string provided

Examples

get_list_of_organizations()
filtered_api<-search_api_by_org(organization_name_contains="Agriculture")

search_api_by_org_type

Search API by organization type

Description

Search API by organization type

Usage

search_api_by_org_type(org_type_contains = "")

Arguments

org_type_contains
string to match in the organization type of the API (case insensitive)

Value

data.frame of API details filtered by organization types that match the string provided

Examples

get_list_of_org_types()
filtered_api<-search_api_by_org_type(org_type_contains="Central")
search_api_by_sector  

Search API by Sector

Description
Search API by Sector

Usage
search_api_by_sector(sector_name_contains = "")

Arguments
sector_name_contains
string to match in the organization type of the API (case insensitive)

Value
data.frame of API details filtered by Sectors that match the string provided

Examples
get_list_of_sectors()
filtered_api<-search_api_by_sector(sector_name_contains="Consumer")

search_api_by_source  

Search API by Data Source

Description
Search API by Data Source

Usage
search_api_by_source(source_name_contains = "")

Arguments
source_name_contains
string to match in the organization type of the API (case insensitive)

Value
data.frame of API details filtered by Sectors that match the string provided

Examples
get_list_of_sources()
filtered_api<-search_api_by_source(source_name_contains="gov")
search_api_by_title  

Search API by title

Description

Search API by title

Usage

search_api_by_title(title_contains = "")

Arguments

title_contains  string to match in the title of the API (case insensitive)

Value

data.frame of API details filtered by titles that match the string provided

Examples

filtered_api<-search_api_by_title(title_contains="Air Quality")

search_api_by_updated_date  

Search API by Updated Date

Description

Returns APIs which were updated on a specific date. This function takes in a Date object as its input. Use ymd/mdy/dmy functions from the package lubridate to make this easier.

Usage

search_api_by_updated_date(date = Sys.Date())

Arguments

date  A Date object corresponding to chosen date of update

Value

data.frame of API details filtered by date of update

Examples

filtered_api<-search_api_by_updated_date(date=as.Date("2021-12-20"))
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