

Package ‘datagovindia’

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Title Data.gov.in API Wrapper

Version 1.0.4

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, xml2

Encoding UTF-8

RoxygenNote 7.1.1

Suggests rmarkdown, knitr, testthat, lubridate

VignetteBuilder knitr

NeedsCompilation no

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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

```
check_internet_connection()
```

Value

Message

Examples

```
check_internet_connection()
```

`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 a an R-friendly data frame.

Usage

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

Arguments

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

Value

data.frame containing the queried data

Examples

```
## 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 | <i>Get fields contained in the response of the API using the API index name</i> |
|----------------|---|

Description

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

Usage

```
get_api_fields(api_index)
```

Arguments

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/xxxxxxx 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

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

| | |
|--------------|---|
| get_api_info | <i>Get information about the API using the API index name</i> |
|--------------|---|

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-c1bfd384ba69")
```

| | |
|---------------------------|---|
| get_list_of_organizations | <i>Get a list of unique organizations</i> |
|---------------------------|---|

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

```
get_list_of_org_types()
```

Value

character vector of organization types

Examples

```
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

```
get_list_of_sectors()
```

Value

character vector of sectors

Examples

```
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

```
get_list_of_sources()
```

Value

character vector of sectors

Examples

```
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

```
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

```
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 | <i>Registering/Validating User API key</i> |
|------------------|--|

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>

Usage

```
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

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

| | |
|----------------------------|-----------------------------------|
| search_api_by_created_date | <i>Search API by Created Date</i> |
|----------------------------|-----------------------------------|

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

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

Arguments

| | |
|------|--|
| date | A Date object corresponding to chosen date of creation |
|------|--|

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 = "")
```

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_organization(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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