

# Package ‘data360r’

April 30, 2020

**Type** Package

**Title** Wrapper for 'TCdata360' and 'Govdata360' API

**Version** 1.0.8

**Description** Makes it easy to engage with the Application Program Interface (API) of the 'TCdata360' and 'Govdata360' platforms at <<https://tcdata360.worldbank.org/>> and <<https://govdata360.worldbank.org/>>, respectively. These application program interfaces provide access to over 5000 trade, competitiveness, and governance indicator data, metadata, and related information from sources both inside and outside the World Bank Group. Package functions include easier download of data sets, metadata, and related information, as well as searching based on user-inputted query.

**License** MIT + file LICENSE

**Encoding** UTF-8

**LazyData** true

**URL** <https://github.com/mrpsonglao/data360r>

**Date** 2020-04-20

**Imports** data.table, reshape2, jsonlite, utils, curl

**RoxygenNote** 7.1.0

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2020-04-30 17:40:02 UTC

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get_data360	<i>Get TC/Govdata360 data from API</i>
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## Description

Downloads the requested data by using the TCdata360 API at <https://tcdata360.worldbank.org/docs> or Govdata360 API at <https://govdata360.worldbank.org/docs>. The function generates a data frame (wide or long, depending on user input).

## Usage

```
get_data360(
  site = "tc",
  indicator_id = NULL,
  dataset_id = NULL,
  country_iso3 = NULL,
  timeframes = NULL,
  output_type = "wide"
)
```

## Arguments

site	string pertaining to the data360 site to download data from. Possible choices: 'tc' for TCdata360, 'gov' for Govdata360
indicator_id	NULL (optional); Vector of indicators codes. Should be left NULL if dataset_id is not NULL.
dataset_id	NULL (optional); Character vector of Dataset IDs for all indicator data is to be downloaded. Should be left NULL if indicator_id is not NULL.
country_iso3	defaults to c('USA', 'PNG', 'PHL') (optional); Vector of countries (ISO-3 3-letter character codes, e.g. 'PNG', 'USA', 'PHL') for which the data is needed. Leaving this NULL pulls data for every available country.
timeframes	NULL (optional); Vector of years to restrict results data to. Leaving this NULL gets all available timeframes. Important note: timeframes parameter cannot be non-NULL while the other parameters are NULL, since data request is too large.
output_type	string pertaining to the output type. Possible choices include: 'wide' == one row contains multi-year observations 'long' == one row refers to one year only.

## Details

Hint: Don't know what codes to write as inputs for this function? Helpful functions include:

- See [search\\_360](#) to get search TC/Govdata360 indicators, countries, categories, and dataset lists.
- See [get\\_metadata360](#) to get indicator/dataset/country-level metadata.
- See [get\\_resources360](#) to get additional resource information.

## Value

Data frame containing requested data

## Examples

```
## Since all functions download data through API, these are wrapped with
## the "donttest" function as advised by CRAN
#get data for dataset ID 51 in TCdata360
df <- get_data360(dataset_id = 51)

#get data for countries USA, PHL in Govdata360
df2 <- get_data360(site = 'gov', country_iso3 = c('USA', 'PHL'))

#get data for indicator IDs 944, 972 in TCdata360
df3 <- get_data360(indicator_id = c(944, 972))

#get data for indicator IDs 944, 972 in 2011-2013 in long format in TCdata360
df4 <- get_data360(indicator_id = c(944, 972), timeframes = c(2011, 2012),
output_type = 'long')
```

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get_metadata360	<i>Get TC/Govdata360 metadata from API</i>
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## Description

Downloads the requested metadata by using the TCdata360 API at <https://tcdata360.worldbank.org/docs> or Govdata360 API at <https://govdata360.worldbank.org/docs>. The function generates a wide dataframe.

## Usage

```
get_metadata360(site = "tc", metadata_type = "countries")
```

## Arguments

site	string pertaining to the data360 site to download data from. Possible choices: 'tc' for TCdata360, 'gov' for Govdata360
metadata_type	string pertaining to the metadata to be downloaded. Possible choices: 'countries' == Lists metadata for all countries and regions. 'indicators' == Lists metadata for all indicators. Does not return actual data. 'datasets' == Lists metadata for all datasets.

## Details

Hint: Want to get other data? Helpful functions include:

- See [search\\_360](#) to get search TC/Govdata360 indicators, countries, categories, and dataset lists.
- See [get\\_data360](#) to get actual indicator/dataset/country-level data.
- See [get\\_resources360](#) to get additional resource information.

## Value

Data frame (wide) containing requested metadata

## Examples

```
## Since all functions download data through API, these are wrapped with
## the "donttest" function as advised by CRAN
#get all indicator metadata in Govdata360
df_indicators <- get_metadata360(site="gov", metadata_type = "indicators")

#get all country metadata in TCdata360
df_countries <- get_metadata360(metadata_type = 'countries')

#get all dataset metadata in TCdata360
df_datasets <- get_metadata360(metadata_type = 'datasets')
```

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get\_resources360      *Get TC/Govdata360 resource information from API*

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## Description

Downloads the requested resource information by using the TCdata360 API at <https://tcdata360.worldbank.org/docs> or Govdata360 API at <https://govdata360.worldbank.org/docs>. The function generates a wide dataframe containing resource information.

## Usage

```
get_resources360(site = "tc", resource_type = "nav")
```

## Arguments

site	string pertaining to the data360 site to download data from. Possible choices: 'tc' for TCdata360, 'gov' for Govdata360
resource_type	string pertaining to the metadata to be downloaded. Possible choices: 'related' == Find WBG content related to certain topics and countries. Note that this endpoint calls a number of external API so may take around 10s to return on the initial call, however after this the response will be cached. 'toolkits' == Find WBG toolkits related to certain topics and subtopics. 'nav' == List root categories in navigational hierarchy.

**Details**

Hint: Want to get other data? Helpful functions include:

- See [search\\_360](#) to get search TC/Govdata360 indicators, countries, categories, and dataset lists.
- See [get\\_data360](#) to get actual indicator/dataset/country-level data.
- See [get\\_metadata360](#) to get indicator/dataset/country-level metadata.

**Value**

Data frame (wide) containing requested resource information

**Examples**

```
## Since all functions download data through API, these are wrapped with
## the "donttest" function as advised by CRAN
#get all root-level categories in TCdata360
df_nav <- get_resources360()

#get all toolkits from Govdata360
df_toolkits <- get_resources360(site='gov', resource_type = 'toolkits')
```

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search_360	<i>Search TC/Govdata360 indicators, countries, categories, and dataset lists</i>
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**Description**

Searches using the TCdata360 API at <https://tcdata360.worldbank.org/docs> or Govdata360 API at <https://govdata360.worldbank.org/docs>. The function generates a wide dataframe containing the top search results related to the query.

**Usage**

```
search_360(
  search_string = "World Bank",
  site = "tc",
  search_type = NULL,
  limit_results = NULL
)
```

**Arguments**

search\_string string to query in TC/Govdata360

site string pertaining to the data360 site to download data from. Possible choices: 'tc' for TCdata360, 'gov' for Govdata360

`search_type` NULL (optional). Character vector of search types to include. Possible values include: 'indicator', 'category', 'country' Leaving this NULL will return all possible search results.

`limit_results` NULL (optional). Number pertaining to the number of top results to be kept.

### Details

Hint: Want to use your search results to call data? Helpful functions include:

- See [get\\_data360](#) to get actual indicator/dataset/country-level data.
- See [get\\_metadata360](#) to get indicator/dataset/country-level metadata.
- See [get\\_resources360](#) to get additional resource information.

### Value

List containing top search results

### Examples

```
## Since all functions download data through API, these are wrapped with
## the "donttest" function as advised by CRAN
#search a country's code in TCdata360
search_360('Philippines', search_type = 'country')

#search for top 10 relevant indicator codes in TCdata360
search_360('GDP', search_type = 'indicator', limit_results = 10)

#search for top 10 indicators of a database in TCdata360
search_360('World Development Indicators', search_type = 'indicator',
limit_results = 10)

#search for top 10 indicators of a data provider in TCdata360
search_360('WEF', search_type = 'indicator', limit_results = 10)

#search for top 10 relevant categories in Govdata360
search_360('Governance', site='gov', search_type = 'category', limit_results = 10)
```

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