

Package ‘imf.data’

March 6, 2024

Title An Interface to IMF (International Monetary Fund) Data JSON API

Version 0.1.5

Description A straightforward interface for accessing the IMF (International Monetary Fund) data JSON API, available at [<https://data.imf.org/>](https://data.imf.org/). This package offers direct access to the primary API endpoints: Dataflow, DataStructure, and CompactData. And, it provides an intuitive interface for exploring available dimensions and attributes, as well as querying individual time-series datasets. Additionally, the package implements a rate limit on API calls to reduce the chances of exceeding service limits (limited to 10 calls every 5 seconds) and encountering response errors.

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Encoding UTF-8

RoxygenNote 7.2.3

Imports methods, utils, stats, curl, jsonlite

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

URL <https://pedrobtz.github.io/imf.data/>

BugReports <https://github.com/pedrobtz/imf.data/issues>

NeedsCompilation no

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list_datasets	<i>List all available Time Series Datasets</i>
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Description

List all available Time Series Datasets

Usage

```
list_datasets()
```

Value

a data.frame with columns 'Id' and 'Description'.

Examples

```
d <- list_datasets()
head(d)
```

load_datasets	<i>Loads Time Series Datasets</i>
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Description

Loads Time Series Datasets

Usage

```
load_datasets(id, use_cache = TRUE)
```

Arguments

id	is character vector of Dataset Series identifier.
use_cache	is Boolean, defaults to TRUE, if TRUE it reloads the Dataset from cached values.

Value

a dataset object for the time-series identifier, i.e. a list containing a list 'dimensions' of data.frames with the valid dimensions values, and a function 'get_series' to retrieve time-series data.

Examples

```
DOT <- load_datasets("DOT")

DOT$get_series(freq = "M",
               ref_area = "GB",
               indicator = "TMG_CIF_USD",
               counterpart_area = c("B0", "W00"),
               start_period = "2022-01-01",
               end_period = "2022-12-31")
```

mt_compact_data	<i>Calls API endpoint 'CompactData' to get Dataset time series</i>
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Description

Calls API endpoint 'CompactData' to get Dataset time series

Usage

```
mt_compact_data(id, dimensions, start_period = NA, end_period = NA)
```

Arguments

id	is a Dataset Series identifier.
dimensions	is a named list with the dimensions query.
start_period	is time series start date with formats.
end_period	is time series end date with format. See Details for the valid formats.

Details

The 'start_period' and 'end_period' parameters should have formats: 'yyyy', 'yyyy-mm' or 'yyyy-mm-dd'.

Value

a list with content of 'CompactData' response.

Examples

```
DOT <- mt_compact_data("DOT", list("M", "GB", "TMG_CIF_USD", c("B0", "W00")))
```

mt_dataflow	<i>Calls API endpoint 'Dataflow'</i>
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Description

Calls API endpoint 'Dataflow'

Usage

```
mt_dataflow()
```

Value

a list with content of 'Dataflow' response.

Examples

```
DF <- mt_dataflow()
```

mt_data_structure	<i>Calls API endpoint 'DataStructure'</i>
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Description

Calls API endpoint 'DataStructure'

Usage

```
mt_data_structure(id)
```

Arguments

`id` is a Dataset Series identifier.

Value

a list with content of 'DataStructure' response.

Examples

```
DOT <- mt_data_structure("DOT")
```

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