

Package ‘kofdata’

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Type Package

Version 0.1.3

Title Get Data from the 'KOF Datenservice' API

Description Read Swiss time series data from the 'KOF Datenservice' API, <<https://datenservice.kof.ethz.ch>>. The API provides macroeconomic survey data, business cycle and further macro economic time series about Switzerland. The package itself is a set of wrappers around the 'KOF Datenservice' API. The 'kofdata' package is able to consume public information as well as data that requires an API token.

Depends R (>= 3.0.0), jsonlite (>= 1.1), httr

Imports xts, zoo

URL <https://github.com/KOF-ch/kofdata>

BugReports <https://github.com/KOF-ch/kofdata/issues>

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License GPL-2

LazyData true

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Suggests testthat

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cantons *Vector of Swiss cantons*

Description

Vector of Swiss cantons

Usage

```
cantons(full = F)
```

Arguments

full logical full names or two letter classification. defaults to FALSE.

download_cached_file *get_dataset*

Description

Download a predefined set of time series.

Usage

```
download_cached_file(username, api_key, file_to_download, target = NULL)
```

Arguments

username	Your dataservice user name
api_key	Your API key
file_to_download	The name of the file to retrieve.
target	Path to the location, at which to store the file. If NULL, the file will be saved to the working directory.

Examples

```
f <- download_cached_file("kofdatapkg", "313984fcd9f343d3961891319b0ed321",
"empty.txt",file.path(tempdir(),"empty.txt"))
```

get_dataset	<i>Download Pre-Defined Dataset</i>
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Description

Download a predefined set of time series.

Usage

```
get_dataset(set_name, api_key = NULL, show_progress = FALSE)
```

Arguments

set_name	The name of the set you wish to download. For a list of available sets, go to [TODO]
api_key	Your API key. This is only needed if accessing non-public time series. Defaults to NULL (public data).
show_progress	If set to true, shows a progress bar of the data being downloaded.

Examples

```
get_dataset("ds_kmi_mixed_freq",show_progress = TRUE)
```

get_legacy_key	<i>Get a Former Time Series Identifier from KOF Database</i>
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Description

Get legacy keys given new time series keys. Note that not all records need to have a legacy key because there are more new keys than old keys.

Usage

```
get_legacy_key(ts_keys)
```

Arguments

ts_keys	A vector of time series keys
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Value

A named list of legacy keys

Examples

```
get_legacy_key("ch.kof.inu.run1.ng08.fx.q_ql_ass_bs.balance")
```

```
get_metadata          Get Localized Meta Information
```

Description

Download metadata given a time series key.

Usage

```
get_metadata(ts_keys, locale = c("en", "de", "fr", "it"))
```

Arguments

ts_keys	A vector of time series keys.
locale	character ISO-2-digit language of requested metadata. Meta data are for survey related typically available in English, German, French and Italian. Non survey data are not provided with meta information, yet.

Value

A named list of lists containing metadata.

Examples

```
get_metadata("ch.kof.inu.run1.ng08.fx.q_ql_ass_bs.balance", "en")
```

```
get_remaining_quota  Check Remaining Quota
```

Description

Query the API for the number of time series downloads remaining in the current month.

Usage

```
get_remaining_quota(api_key)
```

Arguments

api_key	Your API key
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Examples

```
get_remaining_quota("313984fcd9f343d3961891319b0ed321")
```

get_time_series	<i>Get Time Series form KOF Datenservice API</i>
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Description

Download time series data from the KOF web API. To explore the available data and find the keys to series you are interested in, run [start_key_explorer](#).

Usage

```
get_time_series(ts_keys, api_key = NULL, show_progress = FALSE)
```

Arguments

ts_keys	A vector of timeseries keys
api_key	Your API key. This is only needed if accessing non-public time series.
show_progress	If set to true, shows a progress bar of the data being downloaded.

Examples

```
get_time_series("kofbarometer")
```

list_available_sets	<i>List Available Set Names and Their Description</i>
---------------------	---

Description

Sets are pre-defined lists of time series. Sets are the convenient alternative to concatenating many series in an URL.

Usage

```
list_available_sets()
```

Value

A data frame with the names, descriptions and public availability of datasets. These sets can be downloaded via `get_dataset`.

Examples

```
list_available_sets()
```

list_cached_files *Show Cached Files of Specific User*

Description

Some users get individually composed, cached files. If you ordered such a service you can list all files available to you.

Usage

```
list_cached_files(username, api_key)
```

Arguments

username	Your dataservice user name
api_key	Your API key

Examples

```
available_files <- list_cached_files("kofdatapkg",  
"313984fcd9f343d3961891319b0ed321")  
available_files
```

list_keys_in_set *List All Keys in a Set*

Description

List the keys of all time series in a set. To learn more about specific keys, use `get_metadata`.

Usage

```
list_keys_in_set(setname)
```

Arguments

setname	The name of the set
---------	---------------------

Value

If a single set name is provided, a vector of time series keys. If multiple set names are provided, a list of vectors of time series keys.

Examples

```
list_keys_in_set("ds_kmi_mixed_freq")
```

`list_public_keys` *List Keys for All Publicly Available Time Series*

Description

List Keys for All Publicly Available Time Series

Usage

```
list_public_keys()
```

Value

An array of all public time series keys.

Examples

```
list_public_keys()
```

`start_key_explorer` *Start the KOF Key Explorer*

Description

Opens the key explorer page in your browser. The key explorer is a web application designed to help you quickly find the identifying keys for the time series you are interested in.

Usage

```
start_key_explorer()
```

Examples

```
start_key_explorer()
```

translate_legacy_keys *translate_legacy_keys*

Description

Gives ts_keys for the given legacy keys. Since there is no one to one mapping from old to new keys, it is possible that multiple new keys are returned for an old key. Note: Not all possible new keys are returned. The keys returned by this function should serve as a starting point to find the specific new keys that are needed. For the key explorer to find the exact keys, see [start_key_explorer](#).

Usage

```
translate_legacy_keys(legacy_keys, chunksize = 100)
```

Arguments

legacy_keys A vector of legacy keys for which to find new keys
chunksize integer to set chunksize in order to avoid URLs that are too long.

Value

A list of vectors of new ts_keys

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