

# Package ‘kofdata’

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**Type** Package

**Version** 0.1.5

**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 macro economic time series data mostly 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

**RoxygenNote** 7.1.1

**Suggests** testthat

**Encoding** UTF-8

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**Repository** CRAN

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cantons	<i>Vector of Swiss cantons</i>
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### Description

Vector of Swiss cantons

### Usage

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

### Arguments

full	logical full names or two letter classification. defaults to FALSE.
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download_cached_file	<i>get_dataset</i>
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### 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                      *Download Pre-Defined Dataset*

---

**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                      *Get a Former Time Series Identifier from KOF Database*

---

**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("kofbarometer", "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")
```

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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. year-month-day, otherwise only year and month.

**Examples**

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

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list_available_sets	<i>List Available Set Names and Their Description</i>
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**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(api_key = NULL)
```

**Arguments**

api_key	Your API key. This is only needed if accessing non-public sets
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**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, api_key = NULL)
```

### Arguments

setname	The name of the set
api_key	Your API key. This is only needed if accessing non-public sets

### 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")
```

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start_key_explorer	<i>Start the KOF Key Explorer</i>
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**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()
```

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translate_legacy_keys	<i>translate_legacy_keys</i>
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---

**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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