

Package ‘pxweb’

December 5, 2016

Type Package

Title R Interface to the PX-Web/PC-Axis API

Version 0.6.3

Date 2016-05-06

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Description Generic interface for the PX-Web/PC-Axis API. The PX-Web/PC-Axis API is used by organizations such as Statistics Sweden and Statistics Finland to disseminate data. The R package can interact with all PX-Web/PC-Axis APIs to fetch information about the data hierarchy, extract metadata and extract and parse statistics to R data.frame format. PX-Web is a solution to disseminate PC-Axis data files in dynamic tables on the web. Since 2013 PX-Web contains an API to disseminate PC-Axis files.

VignetteBuilder knitr

URL <https://github.com/rOpenGov/pxweb/>

BugReports <https://github.com/rOpenGov/pxweb/issues>

Depends methods

Imports data.table, plyr, stringr, RJSONIO, httr (>= 1.1)

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Suggests testthat (>= 0.11), ggplot2, knitr, rmarkdown

RoxygenNote 5.0.1

NeedsCompilation no

Repository CRAN

Date/Publication 2016-12-05 18:28:48

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api_catalogue *Get the api catalogue*

Description

Get the api catalogue

Usage

```
api_catalogue()
```

Details

Get the catalogue of api and store it as a list.

Examples

```
api_catalogue()
```

get_pxweb_data *Get data from a bottom node in PX-WEB API*

Description

This function fetches actual data (i.e. values)

Usage

```
get_pxweb_data(url, dims, clean = FALSE)
```

Arguments

url	URL to get data from (usually sufficient to submit the base URL, supplied via the base_url() function, and the name of the variable).
dims	A list of dimensional parameters to filter data by. Note that values <i>must</i> be submitted for all dimensions of the data. If you don't want to filter data, submit an asterisk in quotation marks ("*") instead of values for that dimension.
clean	Clean and melt the data to R format.

Details

There are five documented filter types in the PX-WEB API documentation; "Item", "All", "Top", "Agg" and "Vs". This function currently only supports the "Item" and "All" modes. To use "Item" selection, simply submit a value or vector of values with each dimensional parameter. To use "All" selection, submit a wildcard asterisk ("*") instead of a value. For detailed examples see the installed example files in the `examples` folder of `path.package("pxweb")` (these are also viewable on the project's GitHub page).

See Also

[get_pxweb_metadata](#), [get_pxweb_dims](#), [get_pxweb_levels](#)

Examples

```
## Not run:
test_data <-
  get_pxweb_data(url = "http://api.scb.se/OV0104/v1/doris/sv/ssd/PR/PR0101/PR0101E/Basbeloppet",
                dims = list(ContentsCode = c('PR0101A1'), Tid = c('*')),
                clean = FALSE)

## End(Not run)
```

interactive_pxweb

Find and download data interactively from PX-WEB API

Description

Wrapper function (for [get_pxweb_data](#) and [get_pxweb_metadata](#)) to simply find and download data to the current R session.

Usage

```
interactive_pxweb(api = NULL, version = NULL, language = NULL,
                 history = FALSE, ...)
```

Arguments

<code>api</code>	The name of the pxweb api to connect to or an pxweb_api object. Use api_catalogue to get a list of apis.
<code>version</code>	The version of the pxweb api to use. Default is pxweb api default, see api_catalogue .
<code>language</code>	The language of the pxweb api to use. Default is english.
<code>history</code>	keep the history when the function is running.
<code>...</code>	further parameters. These are currently ignored.

See Also

[get_pxweb_metadata](#), [get_pxweb_data](#)

Examples

```

api_catalogue() # List apis
## Not run:
d <- interactive_pxweb()
d <- interactive_pxweb("api.scb.se")
d <- interactive_pxweb("api.scb.se", language = "sv")

## End(Not run)

```

pxweb	<i>pxweb</i>
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Description

Interface to the PX-WEB API

pxweb_api-class	<i>A Reference Class to represent an pxweb_api</i>
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Description

A Reference Class to represent an pxweb_api

Fields

api The name of the api (api domain)
description Short description of the pxweb api.
url An url template for the pxweb api.
versions A character vector with versions of the api.
languages A character vector with languages of the api.
calls_per_period The number of allowed calls per period.
period_in_seconds The length of the period with allowed calls.
max_values_to_download Maximum number of values to download with each call.

Methods

base_url(version = NULL, language = NULL) Create a base url from the api for version and language. The first element of versions and languages is used as standard.
check_alt(version = NULL, language = NULL) Check if the version/language alternative exist in the object.
check_input() Check the consistency of the fields.
get_api(api_name) Get the api configuration from inst/extdata/api.json for the api_name.

`initialize(get_api = NULL, ...)` Create a new `pxweb_api` object.
`pxweb_api_to_list()` Create a list of the current `pxweb_api` object
`test_api(test_type = "fast", seed = as.integer(Sys.time()))` Test to connect to the api and download for each api version/language.
:param test_type: c("fast", "sample", "full").
"fast" check that one random datapoint can be downloaded from each api
"sample" check that one random datapoint can be downloaded from each node
"full" check that all datapoints can be downloaded
:param seed: seed to use for random choice of data points.
`write_to_catalogue()` Save/overwrite the current api as a locally stored api.

Examples

```
scb_pxweb_api <- pxweb_api$new(get_api = "api.scb.se")
scb_pxweb_api
```

update_pxweb_apis *Download and update the PXWEB API catalogue*

Description

Download and update the PXWEB API catalogue

Usage

```
update_pxweb_apis()
```

Details

Downloads the latest api catalogue from github.

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