Package ‘povcalnetR’

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Title Client for the 'Povcalnet' API
Version 0.1.0
Description Provides an interface to compute poverty and inequality indicators for more than 160 countries and regions from the World Bank's database of household surveys. It has the same functionality as the 'Povcalnet' website (<http://iresearch.worldbank.org/PovcalNet/>). 'Povcalnet' is a computational tool that allows users to estimate poverty rates for regions, sets of countries or individual countries, over time and at any poverty line. 'Povcalnet' is managed jointly by the data and research group in the World Bank's development economics division. It draws heavily upon a strong collaboration with the poverty and equity global practice, which is responsible for the gathering and harmonization of the underlying survey data.

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Encoding UTF-8
LazyData true
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Depends R (>= 3.2.0)
Imports purrr, stringr, httr, jsonlite, readr, tibble, dplyr, js, tidyr, memoise, naniar, ggthemes, ggplot2
Suggests testthat (>= 2.1.0), assertthat, knitr, rmarkdown, forcats, scales
VignetteBuilder knitr

URL https://github.com/worldbank/povcalnetR
BugReports https://github.com/worldbank/povcalnetR/issues

NeedsCompilation no

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build_query_string

Description

build_query_string Create simplified povcalnet query string

Usage

build_query_string(country, povline, year, aggregate = FALSE,
                   fill_gaps = FALSE, coverage = "all", ppp = NULL, format = "json")

Arguments

country character: list of country iso3 code (accepts multiple) or ‘all’. Use iso3 codes
povline numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
year numeric: list of years, or ‘all’; or ‘last’.
aggregate logical: ‘TRUE’ will return aggregate results, ‘FALSE’ country-level results.
fill_gaps logical: ‘TRUE’ will interpolate / extrapolate values when surveys are not available for a specific year.
coverage character: Can take one of four values: ‘all’ (default), ‘national’, ‘urban’, ‘rural’.
ppp numeric: Optional - Allows the selection of custom PPP (Purchasing Power Parity) exchange rates
format character: Response format to be requested from the API: ‘csv’ or ‘json’

Value

character
**build_query_string_cl**

**Examples**

```r
ebuild_query_string(country = c("ALB", "CHN"),
povline = 1.9,
year = c(2002, 2012))
```

**Description**

`build_query_string_cl` Create povcalnet query string for country level, survey year specification

**Usage**

```r
build_query_string_cl(country, povline, year, ppp = NULL,
coverage_type = NULL, format = "json")
```

**Arguments**

- `country` character: Requested country. Use **iso3 codes**
- `povline` numeric: Requested poverty lines in international dollars
- `year` numeric: Requested survey years
- `ppp` numeric: Optional - Custom PPP exchange rates (Purchasing Power parity)
- `coverage_type` character: Optional - Type of data coverage. Take one to the following values rural; urban; national; special_cpi; aggregated_distribution, invalid_ppp
- `format` character: Response format to be requested from the API: ‘csv‘ or ‘json‘

**Value**

character

**Examples**

```r
build_query_string_cl(country = c("ALB", "CHN"),
povline = c(1.9, 2.0),
year = c(2002, 2002))
```
get_countries

Description
Helper function to quickly retrieve the list of iso3 country codes for a specific World Bank region or income group.

Usage
get_countries(region_code)

Arguments
region_code character: A region or income group code. Only accepts one code.

Value
a vector of country code

Examples
get_countries("ECA")

povcalnet

Description
povcalnet Facilitate interaction with the PovcalNet API

Usage
povcalnet(country = "all", povline = 1.9, year = "all",
aggregate = FALSE, fill_gaps = FALSE, coverage = "all",
ppp = NULL, url = "http://iresearch.worldbank.org", format = "csv")

Arguments
country character: list of country iso3 code (accepts multiple) or ‘all’. Use povcalnet_info for full list of countries.
povline numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
year numeric: list of years, or ‘all’.
**aggregate**
logical: ‘TRUE’ will return aggregate results, ‘FALSE’ country-level results.

**fill_gaps**
logical: ‘TRUE’ will interpolate / extrapolate values when surveys are not available for a specific year.

**coverage**
character: Can take one of three values: ‘national’, ‘urban’, ‘rural’

**ppp**
numeric: Optional - Allows the selection of custom PPP (Purchasing Power Parity) exchange rates

**url**
character: API root URL. For testing purposes only, should not be changed for 99 percent of users.

**format**
character: Response format to be requested from the API: ‘csv’ or ‘json’

---

**Value**
data.frame

**Examples**

povcalnet(country = "ALB")

---

**Description**

povcalnet_cl Facilitate interaction with the PovcalNet API. All parameters are specified at the country level (hence the _cl suffix), so if you send a request for two countries, you must also pass two values to the ‘year’ argument, two values to the ‘povline’ argument, etc.

**Usage**

povcalnet_cl(country, povline, year, coverage = NULL, ppp = NULL, url = "http://iresearch.worldbank.org", format = "csv")

**Arguments**

- **country** character: list of country iso3 code (accepts multiple). Use povcalnet_info for full list of countries.
- **povline** numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
- **year** numeric: list of years, or ‘all’, or ‘last’.
coverage character: Can take one of three values: ‘national’, ‘urban’, ‘rural’

ppp numeric: Optional - Allows the selection of custom PPP (Purchasing Power Parity) exchange rates

url character: API root URL. For testing purposes only, should not be changed for 99 percent of users.

format character: Response format to be requested from the API: ‘csv’ or ‘json’

Value

data.frame

Examples

povcalnet_cl(country = c("ALB", "USA"), povline = c(3.2, 5.5), year = c(2012, 2010))

povcalnet_info()

Description

Download updated information on available countries, regions, and surveys from the PovcalNet API

Usage

povcalnet_info(url = "http://iresearch.worldbank.org/povcalnet")

Arguments

url character: Path to file: This parameter should not be modified.

Value
data frame

Examples

povcalnet_info()
povcalnet_wb

**povcalnet_wb** Returns the official WB regional estimates

**Description**

povcalnet_wb Returns the official WB regional estimates

**Usage**

```r
povcalnet_wb(povline = 1.9, year = "all",
url = "http://iresearch.worldbank.org", format = "csv")
```

**Arguments**

- **povline** numeric: poverty line (in 2011 PPP-adjusted USD) to calculate poverty measures
- **year** numeric: list of years, or ‘all’.
- **url** character: API root URL. For testing purposes only, should not be changed for 99 percent of users.
- **format** character: Response format to be requested from the API: ‘csv’ or ‘json’

**Value**

data.frame

**Examples**

```r
povcalnet_wb(year = 2015)
```

---

povcal_info

**povcal_info**

**Description**

Non-memoised version of povcalnet_info()

**Usage**

```r
povcal_info(url = "http://iresearch.worldbank.org/povcalnet")
```

**Arguments**

- **url** character: Path to file: This parameter should not be modified.
Value
data.frame

Examples

povcalnet_info()

---
sample_input	sample_input

Description
A sample dataset to facilitate testing of `povcalnet_cl()` function

Usage
sample_input

Format
A data frame with 5 rows and 5 variables:

- **country**: iso3 country codes
- **poverty_line**: Poverty line, in PPP
- **year**: Survey year in YYYY format
- **ppp**: PPP exchange rate
- **coverage_type**: Survey coverage
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