

Package: pactr (via r-universe)

September 17, 2024

Type Package

Title An Interface to the Pandemic PACT Database

Version 0.0.0.9000

Description The Pandemic PACT <<https://www.pandemicpact.org/>> monitors and analyses global funding and research evidence related to diseases with pandemic potential, as well as broader research preparedness efforts, and is equipped to pivot in response to outbreaks. It collects, curates, codes, and analyses data in alignment with WHO priority diseases and other selected illnesses, including pandemic influenza, mpox, and plague. Pandemic PACT aims to guide policy and decision-making for research funders, policymakers, researchers, multilateral agencies. The database is publicly available for download from its website and from Figshare. This package interfaces with the project's Figshare repository to provide programmatic access to the database along with other data products provided by the project.

License GPL (>= 3)

Depends R (>= 2.10)

Imports countrycode, deposits (>= 0.2.1.60), dplyr, methods, rlang, stringr, tibble, tidyr

Suggests knitr, rmarkdown, spelling, testthat (>= 3.0.0)

Remotes ropenscilabs/deposits

Encoding UTF-8

LazyData true

Language en-GB

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

URL <https://github.com/OxfordIHTM/pactr>, <https://oxford-ihtm.io/pactr/>

BugReports <https://github.com/OxfordIHTM/pactr/issues>

Config/testthat/edition 3

VignetteBuilder knitr

Repository https://oxfordihtm.r-universe.dev

RemoteUrl https://github.com/OxfordIHTM/pactr

RemoteRef HEAD

RemoteSha 7bc7bf21347b68d7831d2797e6e32f574ebd16aa

Contents

pact_cite	2
pact_client_set	3
pact_download_figshare	3
pact_get_group_id	4
pact_list	5
pact_process_figshare	6
pact_process_website_topic_group	7
pact_read_figshare	8
pact_read_website	9
pact_research_category	9
who_country_info	10

Index	11
--------------	-----------

pact_cite	<i>Cite an output/asset available from the Pandemic PACT Figshare repository</i>
-----------	--

Description

Cite an output/asset available from the Pandemic PACT Figshare repository

Usage

```
pact_cite(pact_client, id)
```

Arguments

pact_client	An interface client to the Pandemic PACT Figshare repository. This is usually set/created through a call to <code>pact_client_set()</code> .
id	A unique integer value identifying a specific file in the repository.

Value

A string for recommended bibliographic citation for specific Pandemic PACT output/asset in Date-Cite bibliographic style.

Examples

```
## Not run:  
pact_client <- pact_client_set()  
pact_cite(pact_client, id = 24763548)  
  
## End(Not run)
```

<code>pact_client_set</code>	<i>Initiate a new Pandemic PACT Figshare client session</i>
------------------------------	---

Description

Initiate a new Pandemic PACT Figshare client session

Usage

```
pact_client_set()
```

Value

A local client to the Figshare service.

Examples

```
## Not run:  
pact_client_set()  
  
## End(Not run)
```

<code>pact_download_figshare</code>	<i>Download outputs/assets from Pandemic PACT Figshare repository</i>
-------------------------------------	---

Description

Download outputs/assets from Pandemic PACT Figshare repository

Usage

```
pact_download_figshare(pact_client, id, path, overwrite = FALSE, quiet = TRUE)  
  
pact_download_website(path, overwrite = FALSE, quiet = TRUE)
```

Arguments

<code>pact_client</code>	An interface client to the Pandemic PACT Figshare repository. This is usually set/created through a call to <code>pact_client_set()</code> .
<code>id</code>	A unique integer value identifying a specific file in the repository.
<code>path</code>	The local directory where file is to be downloaded.
<code>overwrite</code>	Logical. Should existing files be overwritten? If TRUE, existing files will be overwritten. Default is FALSE.
<code>quiet</code>	Logical. If TRUE (default), download progress is not displayed.

Value

The full path of the downloaded file.

Examples

```
## Not run:
## From Figshare
pact_client <- pact_client_set()
pact_download_figshare(pact_client, id = 25827649, path = tempdir())

## From website
pact_download_website(path = tempdir())

## End(Not run)
```

`pact_get_group_id` *Get outputs/assets identifiers*

Description

Get outputs/assets identifiers

Usage

```
pact_get_group_id(pact_client)

pact_get_filename(pact_client, id)
```

Arguments

<code>pact_client</code>	An interface client to the Pandemic PACT Figshare repository. This is usually set/created through a call to <code>pact_client_set()</code> .
<code>id</code>	A unique integer value identifying a specific file in the repository.

Value

An integer or character value or vector of values for requested identifier.

Examples

```
## Not run:  
pact_client <- pact_client_set()  
pact_get_group_id(pact_client)  
pact_get_filename(pact_client, id = 24763548)  
  
## End(Not run)
```

pact_list	<i>List all available outputs/assets from Pandemic PACT's Figshare repository</i>
-----------	---

Description

List all available outputs/assets from Pandemic PACT's Figshare repository

Usage

```
pact_list(pact_client)  
  
pact_list_data(pact_client)
```

Arguments

pact_client An interface client to the Pandemic PACT Figshare repository. This is usually set/created through a call to `pact_client_set()`.

Value

A data.frame of available outputs/assets from Pandemic PACT's Figshare repository.

Examples

```
## Not run:  
pact_list(pact_client = pact_client_set())  
  
## End(Not run)
```

pact_process_figshare *Process Pandemic PACT data*

Description

Process Pandemic PACT data

Usage

```
pact_process_figshare(df)

pact_process_figshare_category(df, category, other = NULL, nest = FALSE)

pact_process_figshare_category_pathogen(df)

pact_process_figshare_category_funder(df)
```

Arguments

df	A data.frame of the Pandemic PACT dataset from the Figshare repository or from the website.
category	A character value for the variable category to look for in the fields for df for collapsing multiple fields into one.
other	A character value for the name of the variable in df for values for other for fields that have an other option. Default to NULL to indicate that field category has no other option.
nest	Logical. Should variable/fields with multiple values be nested? Default to FALSE.

Value

A tibble of processed Pandemic PACT dataset.

Examples

```
## Not run:
pact_data <- pact_read_figshare(pact_client_set())
pact_process_figshare(df = pact_data)

## End(Not run)
```

pact_process_website_topic_group

Process variable of interest from Pandemic PACT website data by a grouping variable

Description

Process variable of interest from Pandemic PACT website data by a grouping variable

Usage

```
pact_process_website_topic_group(  
  df,  
  topic,  
  group = NULL,  
  outcome = c("frequency", "money")  
)
```

```
pact_process_website_disease(  
  df,  
  group = NULL,  
  outcome = c("frequency", "money")  
)
```

Arguments

df	A data.frame of the Pandemic PACT dataset from the Figshare repository.
topic	A character value of the variable name in df for the topic of interest.
group	A character value or vector of up to two values of the variable name/s in df to use as grouping variable/s. When specified as NULL (default), no grouping is applied to come up with value of outcome based on the topic of interest. When specified as NULL (default), no grouping is applied.
outcome	The type of outcome. Either "frequency" or "money". Default is "frequency".

Value

A data.frame structured based on specification. If group is NULL, the data.frame presents values for topic as first column and then either frequencies/counts of grants per topic value or sum of monetary amount of grants per topic. if group has one value, the data.frame presents values for group as first column followed by either frequencies/counts of grants per group or sum of monetary amount of grants per group then followed by the topics within each group followed by either frequencies/counts of grants per topic by group or sum of monetary amount of grants per topic by group.

Examples

```
## Not run:  
df <- pact_read_data_website()  
pact_process_website_topic_group(df, topic = "Disease")  
  
## End(Not run)
```

pact_read_figshare *Read datasets from the Pandemic PACT Figshare repository*

Description

Read datasets from the Pandemic PACT Figshare repository

Usage

```
pact_read_figshare(pact_client, tracker_type = c("labelled", "raw"))  
  
pact_read_figshare_dictionary(pact_client)
```

Arguments

pact_client An interface client to the Pandemic PACT Figshare repository. This is usually set/created through a call to `pact_client_set()`.

tracker_type Either "labelled" or "raw". Default is "labelled".

Value

A data.frame of the requested dataset.

Examples

```
## Not run:  
pact_client <- pact_client_set()  
pact_read_figshare_dictionary(pact_client)  
  
## End(Not run)
```

pact_read_website	<i>Read datasets from the Pandemic PACT website</i>
-------------------	---

Description

Read datasets from the Pandemic PACT website

Usage

```
pact_read_website(nest = TRUE, col_list = TRUE)
```

Arguments

nest	Logical. Should variable/fields with multiple values be nested? Default to FALSE.
col_list	Logical. Should variable/fields with multiple values be made into column lists? Only evaluated if nest = TRUE.

Value

A tibble of the dataset from the website structured based on nest and col_list specifications.

Examples

```
## Not run:  
pact_read_website(pact_client)  
  
## End(Not run)
```

pact_research_category	<i>Pandemic PACT Research Categories</i>
------------------------	--

Description

Pandemic PACT Research Categories

Usage

```
pact_research_category
```

Format

A data.frame with 4 columns and 70 rows:

Variable	Description
<i>research_category_code</i>	Two digit research category code
<i>research_category</i>	Research category name
<i>research_subcategory_code</i>	Four digit research sub-category code
<i>research_subcategory</i>	Research sub-category name

Source

Pandemic PACT website <https://www.pandemicpact.org/>

Examples

pact_research_category

who_country_info	<i>World Health Organization (WHO) Country Information</i>
------------------	--

Description

World Health Organization (WHO) Country Information

Usage

who_country_info

Format

A data.frame with 5 columns and 194 rows:

Variable	Description
<i>country_iso3c</i>	ISO-3 country code
<i>who_short_name</i>	Country short name given by WHO
<i>formal_name</i>	Country formal name
<i>who_region</i>	WHO region name to which country belongs to
<i>un_region</i>	UN region name to which country belongs to

Source

Data are drawn from WHO's Data Country list found at <https://data.who.int/countries/>

Examples

who_country_info

Index

* datasets

- pact_research_category, 9
- who_country_info, 10

- pact_cite, 2
- pact_client_set, 3
- pact_download_figshare, 3
- pact_download_website
 - (pact_download_figshare), 3
- pact_get_filename (pact_get_group_id), 4
- pact_get_group_id, 4
- pact_list, 5
- pact_list_data (pact_list), 5
- pact_process_figshare, 6
- pact_process_figshare_category
 - (pact_process_figshare), 6
- pact_process_figshare_category_funder
 - (pact_process_figshare), 6
- pact_process_figshare_category_pathogen
 - (pact_process_figshare), 6
- pact_process_website_disease
 - (pact_process_website_topic_group),
7
- pact_process_website_topic_group, 7
- pact_read_figshare, 8
- pact_read_figshare_dictionary
 - (pact_read_figshare), 8
- pact_read_website, 9
- pact_research_category, 9

- who_country_info, 10