

Package ‘piwikproR’

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Type Package

Title Access 'Piwik Pro' Website Statistics

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Description Run Queries against the API of 'Piwik Pro' <https://developers.piwik.pro/en/latest/custom_reports/http_api/http_api.html>. The result is a tibble.

URL <https://piwikproR.rstats-tips.net>

BugReports <https://github.com/dfv-ms/piwikproR/issues>

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Encoding UTF-8

Imports httr, rjson, tibble, purrr, lubridate, magrittr, dplyr, rlang, stringr, readr (>= 2.1.0), digest, fs, tidyr, glue

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Config/testthat/edition 3

VignetteBuilder knitr

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apply_types	<i>Convert column-type according to column_name</i>
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Description

Convert column-type according to column_name

Usage

apply_types(data, timestamp_to_date = TRUE)

Arguments

- data tibble
- timestamp_to_date boolean convert timestamp to date

Value

tibble

build_filter	<i>Build filter from tribble</i>
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Description

Build filter from tribble

Usage

```
build_filter(filters, global_operator = "and")
```

Arguments

filters	tribble with columns • column • operator • value Possible values for operator: • (not_)contains • (not_)icontains • start_with • ends_with • (not_)matches • eq • neq • (not_)empty
global_operator	"and" or "or"

Value

filter json encoded to feed to [build_query](#)

Examples

```
filters <- tibble::tribble(
  ~column, ~operator, ~value,
  "event_url", "matches", "Zamperoni",
  "event_url", "matches", "-1[34]"
)
# With optional transformation
filters <- tibble::tribble(
  ~column, ~operator, ~value, ~transformation,
  "event_url", "starts_with", "/medien", "to_path",
  "event_url", "matches", "-1[34]", NULL
)
```

```

filters <- build_filter(filters, "and")

# If values of two or more different types are used use lists

filters <- tibble::tribble(
  ~column, ~operator, ~value,
  "device_type", "eq", list(),
  "location_country_name", "eq", list("DE")
)

# This also works for transformation

```

build_query

Build the query

Description

Build the query

Usage

```

build_query(
  date_from,
  date_to,
  website_id,
  columns,
  filters = NULL,
  metric_filters = NULL,
  offset = 0,
  max_lines = 0
)

```

Arguments

date_from	Start date of query
date_to	End date of query
website_id	website_id from piwik
columns	tibble containing columns and transformations (metrics and dimensions)
filters	list containing filter, best built by build_filter
metric_filters	list containing filter, best built by build_filter
offset	offset
max_lines	limit

Value

query as list

Examples

```
columns <- tibble::tribble(
  ~column, ~transformation,
  "event_url", "to_path",
  "event_url", "to_domain",
  "website_name", "",
  "timestamp", "",
  "timestamp", "to_hour_of_day",
  "page_views", ""
)
build_query(lubridate::ymd("2021-01-01"), lubridate::ymd("2021-01-19"),
            "xxx", columns)
```

get_apps_list	<i>get_apps_list fetch all apps</i>
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Description

get_apps_list fetch all apps

Usage

```
get_apps_list(token)
```

Arguments

token login token generated by [get_login_token](#)

Value

data.frame

get_app_detail	<i>get_app_detail fetching details about an app</i>
----------------	---

Description

get_app_detail fetching details about an app

Usage

```
get_app_detail(token, app)
```

Arguments

- token login token generated by [get_login_token](#)
- app app id, see [get_apps_list](#)

Value

data.frame with details about the app

get_column_type	<i>Convert column-type according to column_name</i>
-----------------	---

Description

Convert column-type according to column_name

Usage

```
get_column_type(column_name, timestamp_to_date = TRUE)
```

Arguments

- column_name string
- timestamp_to_date boolean convert timestamp to date

Value

string suggested type of column

get_generic_list	<i>get_generic_list fetches all rows of a given api</i>
------------------	---

Description

get_generic_list fetches all rows of a given api

Usage

```
get_generic_list(token, offset, api_endpoint, columns, datetime_columns)
```

Arguments

token	login token generated by get_login_token
offset	default 0, integer, where to start fetching usergroups
api_endpoint	string with api endpoint
columns	vector of strings containing columnnames
datetime_columns	vector of strings containing columnnames which are converted to datetime

Value

data.frame

get_login_token	<i>Fetch login token</i>
-----------------	--------------------------

Description

Fetch login token

Usage

```
get_login_token(credentials)
```

Arguments

credentials List with fields client_id, client_secret and url

Value

List with login_token

get_metasites_list	<i>get_metasites_list</i>
--------------------	---------------------------

Description

get_metasites_list

Usage

```
get_metasites_list(token)
```

Arguments

token login token generated by [get_login_token](#)

Value

data.frame

get_permissions_for_app
<i>get_permissions_for_app</i>

Description

get_permissions_for_app

Usage

get_permissions_for_app(token, app)

Arguments

- | | |
|-------|--|
| token | login token generated by get_login_token |
| app | app id, see get_apps_list |

Value

data.frame

get_permissions_for_metasite
<i>get_permissions_for_metasite</i>

Description

get_permissions_for_metasite

Usage

get_permissions_for_metasite(token, metasite)

Arguments

- | | |
|----------|--|
| token | login token generated by get_login_token |
| metasite | app id, see get_metasites_list |

Value

data.frame

get_test_credentials	<i>get_test_credentials getting credentials for testing</i>
----------------------	---

Description

Fills credentials out of ENV into a list

Usage

```
get_test_credentials()
```

Value

list

get_usergroups_list	<i>get_usergroups_list fetch all usergroups</i>
---------------------	---

Description

get_usergroups_list fetch all usergroups

Usage

```
get_usergroups_list(token)
```

Arguments

token	login token generated by get_login_token
-------	--

Value

data.frame

<code>get_usergroup_members</code>	<i>get_usergroup_members</i>
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Description

`get_usergroup_members`

Usage

`get_usergroup_members(token, usergroup_id)`

Arguments

- `token` login token generated by [get_login_token](#)
- `usergroup_id` usergroup (see [get_usergroups_list](#))

Value

`data.frame`

<code>get_users_list</code>	<i>get_users_list</i> fetch all users
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Description

`get_users_list` fetch all users

Usage

`get_users_list(token)`

Arguments

- `token` login token generated by [get_login_token](#)

Value

`data.frame`

is_column_a_metric	<i>is_column_a_metric</i>	<i>Checks</i>	<i>if</i>	<i>col-</i>
	<i>umn_name</i>	<i>indicates</i>	<i>numeric</i>	<i>values</i>
				<i>Uses</i>
				<i>https://developers.piwik.pro/en/latest/custom_reports/columns.html</i>

Description

is_column_a_metric Checks if column_name indicates numeric values Uses https://developers.piwik.pro/en/latest/custom_reports/columns.html

Usage

```
is_column_a_metric(column_name)
```

Arguments

column_name string

Value

boolean

MAX_LINES_PER_REQUEST_ANALYTICS_API

Maximum number of lines requested in Analytics-API

Description

Maximum number of lines requested in Analytics-API

Usage

```
MAX_LINES_PER_REQUEST_ANALYTICS_API()
```

Value

int

MAX_LINES_PER_REQUEST_USERS_API	<i>Maximum number of lines requested in Users-API</i>
---------------------------------	---

Description

Maximum number of lines requested in Users-API

Usage

MAX_LINES_PER_REQUEST_USERS_API()

Value

int

release_questions	<i>Ask package specific question during release-process</i>
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Description

Ask package specific question during release-process

Usage

release_questions()

Value

vector of strings

send_query	<i>Send the query and receive the result</i>
------------	--

Description

Send the query and receive the result

Usage

```
send_query(  
  query,  
  token,  
  use_csv = TRUE,  
  fetch_by_day = FALSE,  
  api = "query",  
  caching = FALSE,  
  caching_dir = "cache",  
  convert_types = TRUE  
)
```

Arguments

query	list generated by build_query
token	login token generated by get_login_token
use_csv	logical to choose whether to fetch data via extra csv-request
fetch_by_day	logical fetch data day by day
api	API endpoint ("query", "sessions", "events")
caching	logical Set TRUE to enable caching
caching_dir	character Set directory for saving caching data, default cache
convert_types	logical guess type of columns and set them

Value

result as tibble

send_query_single	<i>Send the query and receive the result</i>
-------------------	--

Description

Send the query and receive the result

Usage

```
send_query_single(query, token, use_csv, api, caching, caching_dir)
```

Arguments

query	list generated by build_query()
token	login token
use_csv	logical to choose whether to fetch data via extra csv-request
api	API endpoint (query, sessions, events)
caching	logical Set TRUE to enable caching
caching_dir	character Set directory for saving caching data

Value

result as list with values data and meta

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