Package 'reveneraR'

October 14, 2022

Title Connect to Your 'Revenera' (Formerly 'Revulytics') Data

Version 0.1.2

Description Facilitates making a connection to the
'Revenera' API and executing various queries. You can use it to
get event data and metadata. The 'Revenera' documentation
is available at
<<https://docs.revenera.com/ui560/report/>>. This package is not
supported by 'Flexera' (owner of the software).

Suggests knitr, rmarkdown, ggplot2

Depends R (>= 3.6.0)

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URL <https://github.com/chrisumphlett/reveneraR>

BugReports <https://github.com/chrisumphlett/reveneraR/issues>

Encoding UTF-8

Imports dplyr (>= 1.0.0), magrittr (>= 1.5), jsonlite (>= 1.6.1),
purrr (>= 0.3.3), httr (>= 1.4.1), tidyselect (>= 1.0.0), tidyr
(>= 1.0.0), tibble (>= 1.0.3)

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R topics documented:

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get_active_users   *Get Active Users by Product ID and Various Date Spans*

Description

For a given period of time (a day, week, or month) Revenera' API summarizes and returns the number of active users. With this function you can return daily, weekly, or monthly active users for multiple product ids.

Usage

```
get_active_users(
  rev_product_ids,
  rev_date_type,
  rev_start_date,
  rev_end_date,
  rev_session_id,
  rev_username
)
```

Arguments

rev_product_ids	A vector of Revenera product id's for which you want active user data.
rev_date_type	Level of aggregation, Revenera will accept "day", "week", or "month".
rev_start_date	Date formatted YYYY-MM-DD. Revenera may give an error if you try to go back too far.
rev_end_date	Date formatted YYYY-MM-DD.
rev_session_id	Session ID established by the connection to Revenera API. This can be obtained with revenera_auth().
rev_username	Revenera username.

Details

You can specify a start and end date but Revenera does not store an indefinite period of historical data. In my experience this is three years but I do not know if this varies on a product or client level.

It is not recommended that your username be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

Value

Data frame with active users for each product id and unique date within the range

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
start_date <- lubridate::floor_date(Sys.Date(), unit = "months") - months(6)
end_date <- Sys.Date() - 1
session_id <- revenera_auth(rev_user, rev_pwd)
monthly_active_users <- get_active_users(
  product_ids_list,
  "month",
  start_date,
  end_date,
  session_id,
  rev_user
)

## End(Not run)
```

---

get_categories_and_events

Get All Categories and Events for a List of Product Ids

Description

Returns all of the unique categories and events (basic and advanced) for each product id.

Usage

```
get_categories_and_events(rev_product_ids, rev_session_id, rev_username)
```

Arguments

rev_product_ids

A vector of Revenera product id's for which you want active user data.

rev_session_id   Session ID established by the connection to Revenera API. This can be obtained with revenera_auth().

rev_username   Revenera username.

Details

It is not recommended that your username be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

Value

Data frame with categories, events and event type by product id.

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
session_id <- revenera_auth(rev_user, rev_pwd)
category_event <- get_categories_and_events(
  product_ids_list, session_id,
  rev_user
)

## End(Not run)
```

---

get_client_metadata   *Get Metadata on Client Ids for a List of Product Ids*

Description

Returns metadata (what Revenera calls "properties") for every Client Id installed during user-
provided date range for all product Ids in a list.

Usage

```
get_client_metadata(
  rev_product_ids,
  rev_session_id,
  rev_username,
  product_properties_df,
  desired_properties,
  installed_start_date,
  installed_end_date,
  chatty = FALSE
)
```

Arguments

rev_product_ids

                A vector of Revenera product id's for which you want active user data.

rev_session_id   Session ID established by the connection to Revenera API. This can be obtained
                with revenera_auth().

rev_username   Revenera username.

```
product_properties_df
```
        Data frame with available properties for all product ids. Can obtain with the get_product_properties function.

```
desired_properties
```
        The property names of the metadata you want to collect.

```
installed_start_date
```
        Date object for the starting date of product installations.

```
installed_end_date
```
        Date object for the ending date of product installations.

```
chatty
```
        The function can be chatty, sending a message to the console for every iteration through a product Id. Many API calls may be required and the console may get very long and it may slow down the execution.

Details

It is not recommended that your username be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

This API call can only return 200 Client Ids at a time. It will take a long time to execute if you have many Client Ids, as the function will submit requests to the API repeatedly; this may even result in a timeout error from the server. In order to provide data for troubleshooting this function will write a message to the console after each call. It is recommended that you divert the console output to a text file. You can do this in multiple ways, including with the sink function (see example for how to do this).

For the same reason you are encouraged to break your request into smaller chunks using the install dates and/or splitting up your product Ids.

Value

Data frame with selected properties for each Client Id.

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
session_id <- revenera_auth(rev_user, rev_pwd)
product_properties <- get_product_properties(
  product_ids_list, session_id,
  rev_user
)
sink("output_filename.txt")
sink(stdout(), type = "message")
client_metadata <- get_client_metadata(
  product_ids_list, session_id,
  rev_user, product_properties, c("Property1", "Property2"),
  start_date, end_date
)
```

```
sink()

## End(Not run)
```

```
get_daily_client_properties
```
Get Daily Property Values for All Clients for a List of Product Ids

---

Description

Returns the list of daily client properties for all the client Ids installed during a user provided date range for all the Product Ids.

Usage

```
get_daily_client_properties(
  rev_product_ids,
  rev_session_id,
  rev_username,
  product_properties_df,
  desired_properties,
  installed_start_date,
  installed_end_date,
  daily_start_date,
  daily_end_date,
  chatty = FALSE
)
```

Arguments

rev_product_ids

> A vector of Revenera product id.

rev_session_id   Session ID established by the connection to Revenera API. This can be obtained with revenera_auth().

rev_username   Revenera username.

product_properties_df

> Data frame with available properties for all product ids. Can obtain with the get_product_properties function.

desired_properties

> The property names of the metadata you want to collect.

installed_start_date

> Date object for the starting date of product installations.

installed_end_date

> Date object for the ending date of product installations.

daily_start_date

> Date object for the starting date of desired properties of the product.

daily_end_date Date object for the ending date of desired properties of the product.

chatty The function can be chatty, sending a message to the console for every iteration through a product Id. Many API calls may be required and the console may get very long and it may slow down the execution.

Details

It is not recommended that your username be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

This API call can only return 200 Client Ids at a time. It will take a long time to execute if you have many Client Ids, as the function will submit requests to the API repeatedly; this may even result in a timeout error from the server. In order to provide data for troubleshooting this function will write a message to the console after each call. It is recommended that you divert the console output to a text file. You can do this in multiple ways, including with the sink function (see example for how to do this).

For the same reason you are encouraged to break your request into smaller chunks using the install dates and/or splitting up your product Ids.

Value

Data frame with selected properties for each Client Id.

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
session_id <- revenera_auth(rev_user, rev_pwd)
product_properties <- get_product_properties(
  product_ids_list,
  session_id, rev_user
)
sink("output_filename.txt")
sink(stdout(), type = "message")
daily_client_properties <- get_daily_client_properties(product_ids_list,
  session_id, rev_user,
  product_properties, c("Property1", "Property2"), start_date, end_date,
  daily_start_date = "01-01-2020", daily_end_date = "01-31-2020"
)
sink()

## End(Not run)
```

---

get_new_users   *Get New Users by Product ID and Various Date Spans*

Description

For a given period of time (a day, week, or month) Revenera' API summarizes and returns the number of new users. With this function you can return daily, weekly, or monthly new users for multiple product ids.

Usage

```
get_new_users(
  rev_product_ids,
  rev_date_type,
  rev_start_date,
  rev_end_date,
  rev_session_id,
  rev_username
)
```

Arguments

rev_product_ids
:   A vector of Revenera product id's for which you want new user data.

rev_date_type   Level of aggregation, Revenera will accept "day", "week", or "month".

rev_start_date Date formatted YYYY-MM-DD. Revenera may give an error if you try to go back too far.

rev_end_date   Date formatted YYYY-MM-DD.

rev_session_id Session ID established by the connection to Revenera API. This can be obtained with revenera_auth().

rev_username   Revenera username.

Details

You can specify a start and end date but Revenera does not store an indefinite period of historical data. In my experience this is three years but I do not know if this varies on a product or client level.

It is not recommended that your username be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

Value

Data frame with new users for each product id and unique date within the range

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
start_date <- lubridate::floor_date(Sys.Date(), unit = "months") - months(6)
end_date <- Sys.Date() - 1
session_id <- revenera_auth(rev_user, rev_pwd)
monthly_new_users <- get_new_users(
  product_ids_list,
  "month",
  start_date,
  end_date,
  session_id,
  rev_user
)

## End(Not run)
```

---

get_product_properties

Get All Properties for a List of Product Ids

Description

Returns all of the unique properties (standard and custom) for each product id by property category.

Usage

```
get_product_properties(rev_product_ids, rev_session_id, rev_username)
```

Arguments

rev_product_ids
        A vector of Revenera product id's for which you want active user data.

rev_session_id   Session ID established by the connection to Revenera API. This can be obtained with revenera_auth().

rev_username   Revenera username.

Details

It is not recommended that your username be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

Value

Data frame with properties and property attributes by product id.

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
session_id <- revenera_auth(rev_user, rev_pwd)
product_properties <- get_product_properties(
  product_ids_list,
  session_id, rev_user
)

## End(Not run)
```

---

get_raw_data_files   *Get Raw Data Files*

Description

Retrieves a list of raw data file exports that are available for a list of product IDs and the download
URL for each file.

Usage

```
get_raw_data_files(rev_product_ids, rev_session_id, rev_username)
```

Arguments

rev_product_ids

> A vector of Revenera product id's for which you want active user data.

rev_session_id   Session ID established by the connection to Revenera API. This can be obtained
with revenera_auth().

rev_username   Revenera username.

Details

Raw data files are an add-on service available through Revenera. If these files are available they can
be downloaded manually from the user portal, or downloaded via R. This function uses the API to
first retrieve the list of files, and then get the download URL for each file.

It is not recommended that your username be stored directly in your code. There are various meth-
ods and packages available that are more secure; this package does not require you to use any one
in particular.

Value

Data frame with available files and URLs.

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
session_id <- revenera_auth(rev_user, rev_pwd)
files_df <- get_raw_data_files(product_ids_list, session_id, rev_user)
file_list <- dplyr::pull(files_df, var = file_name)
for (f in file_list) {
  url <- dplyr::filter(files_df, file_name == f) %>%
    dplyr::pull(download_url)
  download.file(url, mode = "wb", destfile = "download_file_location.zip")
}

## End(Not run)
```

---

get_users   *Get Users by Product ID, Type, and Various Date Spans*

Description

For a given period of time (a day, week, or month) Revenera's API summarizes and returns the number of active users. With this function you can return daily, weekly, or monthly active users for multiple product ids.

Usage

```
get_users(
  rev_product_ids,
  user_type,
  rev_date_type,
  rev_start_date,
  rev_end_date,
  rev_session_id,
  rev_username,
  lost_days = 30,
  lost_reported = "dateLastSeen",
  optional_json = ""
)
```

Arguments

rev_product_ids
:   A vector of Revenera product id's for which you want active user data.

user_type
:   One of "active," "new", or "lost."

rev_date_type
:   Level of aggregation, Revenera will accept "day", "week", or "month".

rev_start_date	Date formatted YYYY-MM-DD. Revenera may give an error if you try to go back too far.
rev_end_date	Date formatted YYYY-MM-DD.
rev_session_id	Session ID established by the connection to Revenera API. This can be obtained with revenera_auth().
rev_username	Revenera username.
lost_days	Required for lost users, the number of consecutive days of inactivity before a client is considered lost.
lost_reported	Required for lost users, should the lost date be the first day of inactivity ("date-LastSeen") or date client is considered lost ("dateDeclaredLost").
optional_json	Optional JSON text to add to the request body for things like global filters.

Details

You can specify a start and end date but Revenera does not store an indefinite period of historical data.

It is not recommended that your username be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

The optional_json parameter is available so that other optional arguments can be added to the api request. This will require the user to consult the API documentation. See README for an example.

Value

Data frame with active users for each product id and unique date within the range

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
start_date <- lubridate::floor_date(Sys.Date(), unit = "months") - months(6)
end_date <- Sys.Date() - 1
session_id <- revenera_auth(rev_user, rev_pwd)
global_filter <- paste0(
  ",\"globalFilters\":{\"licenseType\":",
  "{\"type\":\"string\",\"value\":\"purchased\"}}"
)
monthly_active_users <- get_users(product_ids_list,
  "active",
  "month",
  start_date,
  end_date,
  session_id,
  rev_user,
  optional_json = global_filter
)
```

```
## End(Not run)
```

---

revenera_auth   *Login and Obtain Revenera API Session Id*

Description

A session must first be established before querying the API. This is done using your Revenera username and password.

Usage

```
revenera_auth(rev_username, rev_password)
```

Arguments

rev_username	Revenera username.
rev_password	Revenera password.

Details

It is not recommended that these values be stored directly in your code. There are various methods and packages available that are more secure; this package does not require you to use any one in particular.

Value

A list with details on connection to the Revenera API.

Examples

```
## Not run:
rev_user <- "my_username"
rev_pwd <- "super_secret"
product_ids_list <- c("123", "456", "789")
start_date <- lubridate::floor_date(Sys.Date(), unit = "months") - months(6)
end_date <- Sys.Date() - 1
session_id <- revenera_auth(rev_user, rev_pwd)

## End(Not run)
```

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