

Package ‘qualtRics’

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Type Package

Title Download Qualtrics Survey Data Directly into R

Version 3.0

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Description Qualtrics <<https://www.qualtrics.com/about/>> allows users to collect online data through surveys. This package contains convenience functions to pull survey results straight into R using the Qualtrics API. See <<https://api.qualtrics.com/>> for more information about the Qualtrics API. This package is community-maintained and is not officially supported by Qualtrics.

Imports httr, stringr, readr, jsonlite, assertthat, sjlabelled, yaml, dplyr, rlang

URL <https://jasperhg90.github.io/qualtRics/>

BugReports <https://github.com/JasperHG90/qualtRics/issues>

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Encoding UTF-8

LazyData true

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Suggests knitr, rmarkdown, httpptest

VignetteBuilder knitr

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getSurvey	<i>Export a survey and download into R</i>
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Description

Export a qualtrics survey you own and import the survey directly into R.

Usage

```
getSurvey(surveyID, lastResponseId = NULL, startDate = NULL,
  endDate = NULL, seenUnansweredRecode = NULL, limit = NULL,
  includedQuestionIds = NULL, save_dir = NULL, force_request = FALSE, ...)
```

Arguments

surveyID	String. Unique ID for the survey you want to download. Returned as 'id' by the getSurveys function.
lastResponseId	String. Export all responses received after the specified response. Defaults to NULL.
startDate	String. Filter to only exports responses recorded after the specified date. Accepts dates as character strings in format "YYYY-MM-DD". Defaults to NULL.
endDate	String. Filter to only exports responses recorded before the specified date. Accepts dates as character strings in format "YYYY-MM-DD". Defaults to NULL.
seenUnansweredRecode	String. Recode seen but unanswered questions with a string value. Defaults to NULL.
limit	Integer. Maximum number of responses exported. Defaults to NULL (all responses).
includedQuestionIds	Vector of strings (e.g. c('QID1', 'QID2', 'QID3')). Export only specified questions. Defaults to NULL.
save_dir	String. Directory where survey results will be stored. Defaults to a temporary directory which is cleaned when your R session is terminated. This argument is useful if you'd like to store survey results. The downloaded survey will be stored as an RDS file (see readRDS).

`force_request` Logical. `getSurvey()` saves each survey in a temporary directory so that it can quickly be retrieved later. If `force_request` is TRUE, `getSurvey()` always downloads the survey from the API instead of loading it from the temporary directory. Defaults to FALSE.

... optional arguments. You can pass all arguments listed in [registerOptions](#) (except a different root url / api key). You can also pass a argument 'fileEncoding' (see 'fileEncoding' argument in [readSurvey](#)) to import your survey using a specific encoding.

Author(s)

Jasper Ginn

See Also

See <https://api.qualtrics.com/docs/csv> for documentation on the Qualtrics API.

Examples

```
## Not run:
# Register your Qualtrics credentials if you haven't already
registerOptions(api_token="<YOUR-API-TOKEN>", root_url="<YOUR-ROOT-URL>")
# Retrieve a list of surveys
surveys <- getSurveys()
# Retrieve a single survey
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      verbose=TRUE)

# You can use the same parameters as those found in the qualtrics API documentation
# Found here: https://api.qualtrics.com/docs/csv
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      startDate = "2017-01-01",
                      endDate = "2017-01-31",
                      limit = 100,
                      useLabels = TRUE,
                      seenUnansweredRecode = "UNANS",
                      verbose=TRUE)

# You can also choose to only download an export with specific questions using
# the \link[getSurveyQuestions]{getSurveyQuestions} function.

# Retrieve questions for a survey
questions <- getSurveyQuestions(surveyID = surveys$id[6])
# Retrieve a single survey, filtering for questions I want.
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      includedQuestionIds = c("QID1", "QID2", "QID3"),
                      verbose=TRUE)

## End(Not run)
```

getSurveyQuestions *Retrieve a data frame containing question IDs and labels*

Description

Retrieve a data frame containing question IDs and labels

Usage

```
getSurveyQuestions(surveyID)
```

Arguments

surveyID String. Unique ID for the survey you want to download. Returned as 'id' by the [getSurveys](#) function.

Author(s)

Jasper Ginn, Phoebe Wong

See Also

See <https://api.qualtrics.com/docs> for documentation on the Qualtrics API.

Examples

```
## Not run:
# Register your Qualtrics credentials if you haven't already
registerOptions(api_token="<YOUR-API-TOKEN>", root_url="<YOUR-ROOT-URL>")
# Retrieve a list of surveys
surveys <- getSurveys()
# Retrieve questions for a survey
questions <- getSurveyQuestions(surveyID = surveys$id[6])
# Retrieve a single survey, filtering for questions I want.
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      includedQuestionIds = c("QID1", "QID2", "QID3"),
                      verbose=TRUE)

## End(Not run)
```

`getSurveys`*Retrieve a data frame of all active surveys on Qualtrics*

Description

Retrieve a data frame of all active surveys on Qualtrics

Usage

```
getSurveys()
```

Author(s)

Jasper Ginn

See Also

See <https://api.qualtrics.com/docs> for documentation on the Qualtrics API.

Examples

```
## Not run:
# Register your Qualtrics credentials if you haven't already
registerOptions(api_token="<YOUR-API-TOKEN>", root_url="<YOUR-ROOT-URL>")
# Retrieve a list of surveys
surveys <- getSurveys()
# Retrieve a single survey
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      verbose=TRUE)
# You can use the same parameters as those found in the qualtrics API documentation
# Found here: https://api.qualtrics.com/docs/csv
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      startDate = "2017-01-01",
                      endDate = "2017-01-31",
                      limit = 100,
                      useLabels = TRUE,
                      seenUnansweredRecode = "UNANS",
                      verbose=TRUE)

## End(Not run)
```

 metadata

Download metadata about a survey

Description

Using this function, you can retrieve metadata about your survey. This information includes question metadata (type, options, choices etc), number of responses, general metadata, survey flow etc.

Usage

```
metadata(surveyID, get = list(), ...)
```

Arguments

surveyID	String. Unique ID for the survey you want to download. Returned as 'id' by the getSurveys function.
get	list containing TRUE/FALSE values of one of the following: metadata, questions, responsecounts, blocks, flow, embedded_data or comments. A TRUE value will return that specific element. If you leave this empty, the function will return the metadata, questions and responsecounts elements. See examples below for more information
...	additional options. User may pass an argument called 'questions', which should be a vector containing the names of questions for which you want to return metadata.

Author(s)

Jasper Ginn

Examples

```
## Not run:
# Register your Qualtrics credentials if you haven't already
# Note that you need to pass both the 'api_token' and 'root_url'
# parameters if you call this function for the first time.
registerOptions(api_token="<YOUR-API-TOKEN>", root_url="<YOUR-ROOT-URL>")
# Get metadata for a survey
md <- metadata(surveyID = id)
# Get metadata with specific elements
md_specific <- metadata(surveyID= id, get=list(questions=FALSE, flow=TRUE))
# Get specific question metadata
question_specific <- metadata(surveyID=id, get=list(questions=TRUE), questions=c("Q1", "Q2"))

## End(Not run)
```

qualtRicsConfigFile *Prints an example of a qualtRics configuration file to the console.*

Description

Prints an example of a qualtRics configuration file to the console.

Usage

```
qualtRicsConfigFile(api_token = NULL, root_url = NULL, verbose = TRUE,  
  useLabels = TRUE, convertVariables = TRUE, useLocalTime = FALSE,  
  dateWarning = TRUE)
```

Arguments

api_token	String. API token. Available in your qualtrics account (see: https://api.qualtrics.com/docs/authentication)
root_url	String. Root url for your institution (see: https://api.qualtrics.com/docs/root-url)
verbose	Logical. If TRUE, verbose messages will be printed to the R console. Defaults to TRUE.
useLabels	Logical. TRUE to export survey responses as Choice Text or FALSE to export survey responses as values.
convertVariables	Logical. If TRUE, then the getSurvey function will convert certain question types (e.g. multiple choice) to proper data type in R. Defaults to TRUE.
useLocalTime	Logical. Use local timezone to determine response date values? Defaults to FALSE. See https://api.qualtrics.com/docs/dates-and-times for more information.
dateWarning	Logical. Once per session, qualtRics will emit a warning about date conversion for surveys. You can turn this warning off by changing the flag to FALSE. Defaults to TRUE.

Author(s)

Jasper Ginn

See Also

See <https://api.qualtrics.com/docs/root-url> for documentation on the Qualtrics API. See <https://github.com/JasperHG90/qualtRics/blob/master/README.md#using-a-configuration-file> for more information about the qualtRics configuration file.

Examples

```
## Not run:  
# Execute this line to get instructions on how to make a .qualtrics.yml config file.  
qualtRicsConfigFile()  
  
## End(Not run)
```

readSurvey	<i>Read comma separated csv file from Qualtrics.</i>
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Description

readSurvey Reads comma separated csvdata files generated by Qualtrics software. The second line containing the variable labels is imported. Repetitive introductions to matrix questions are automatically removed. Variable labels are stored as attributes.

Usage

```
readSurvey(file_name, stripHTML = TRUE, legacyFormat = FALSE)
```

Arguments

file_name	String. A csv data file.
stripHTML	Logical. If TRUE, then remove html tags. Defaults to TRUE
legacyFormat	Logical. If TRUE, then import "legacy" format csv files (as of 2017). Defaults to FALSE

Value

A data frame. Variable labels are stored as attributes. They are not printed on the console but are visible in the RStudio viewer.

Author(s)

Adrian Brugger, Stefan Borer & Jasper Ginn

Examples

```
## Not run:  
my_data_frame <- readSurvey("<YOUR-PATH-TO-CSV-FILE>")  
  
## End(Not run)
```

registerOptions	<i>Register qualtrics API key, root url and other options</i>
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Description

This function registers the user's qualtrics API key, root url and other options for the remainder of the R session. This function only needs to be called once (at the beginning of each R session). You may also use a configuration file. See [qualTRicsConfigFile](#) or <https://github.com/JasperHG90/qualTRics/blob/master/README.md#using-a-configuration-file>. Note that you must pass both an api token and a root url if you call this function for the first time in a session and you're not using a config file. Thereafter, you can pass these options individually.

Usage

```
registerOptions(verbose = TRUE, useLabels = TRUE, convertVariables = TRUE,  
               useLocalTime = FALSE, dateWarning = TRUE, ...)
```

Arguments

verbose	Logical. If TRUE, verbose messages will be printed to the R console. Defaults to TRUE.
useLabels	Logical. TRUE to export survey responses as Choice Text or FALSE to export survey responses as values.
convertVariables	Logical. If TRUE, then the getSurvey function will convert certain question types (e.g. multiple choice) to proper data type in R. Defaults to TRUE.
useLocalTime	Logical. Use local timezone to determine response date values? Defaults to FALSE. See https://api.qualtrics.com/docs/dates-and-times for more information.
dateWarning	Logical. Once per session, qualtrics will emit a warning about date conversion for surveys. You can turn this warning off by changing the flag to FALSE. Defaults to TRUE.
...	Either one or both of 'api_token' and 'root_url' to register the Qualtrics api key and institution-specific root url manually. (see example). See also qualTRicsConfigFile for an explanation of the root_url and api_token parameters.

Author(s)

Jasper Ginn

See Also

See <https://github.com/JasperHG90/qualTRics/blob/master/README.md#using-a-configuration-file> for more information about the qualTRics configuration file. See: <https://api.qualtrics.com/docs/authentication> to find your Qualtrics API key and <https://api.qualtrics.com/docs/root-url> for more information about the institution-specific root url.

Examples

```
## Not run:
# Register your Qualtrics credentials if you haven't already
# Note that you need to pass both the 'api_token' and 'root_url'
# parameters if you call this function for the first time.
registerOptions(api_token="<YOUR-API-TOKEN>", root_url="<YOUR-ROOT-URL>")
# Register a different root url
registerOptions(root_url="<YOUR-OTHER-ROOT-URL>")
# Retrieve a list of surveys
surveys <- getSurveys()
# Retrieve a single survey
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      verbose=TRUE)
# You can use the same parameters as those found in the qualtrics API documentation
# Found here: https://api.qualtrics.com/docs/csv
mysurvey <- getSurvey(surveyID = surveys$id[6],
                      save_dir = tempdir(),
                      startDate = "2017-01-01",
                      endDate = "2017-01-31",
                      limit = 100,
                      seenUnansweredRecode = "UNANS")

## End(Not run)
```

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