Package: istacbaser (via r-universe)

July 1, 2024

Type Package

Title Programmatic Access to Data from the ISTAC API

Description Functions for searching and downloading data and
statistics from the ISTAC API
(<<http://www.gobiernodecanarias.org/istac/>>).

Version 0.0.0.9000

URL <https://github.com/chrglez/istacr>

BugReports <https://github.com/chrglez/istacr/issues>

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Encoding UTF-8

LazyData true

Imports jsonlite, lubridate (>= 1.5.0)

RoxygenNote 6.1.0

Suggests knitr, rmarkdown, ggplot2

VignetteBuilder knitr

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

RemoteUrl https://github.com/rOpenSpain/istacbaser

RemoteRef HEAD

RemoteSha b781a139dd87e80601bcd353ce0e651af3e3104b

Contents

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cache *Cached information from the ISTAC API*

Description

This data is a cached result of the accesibles tables using the ISTAC API. By default functions istacbase and istacbase_search use this data for the cache parameter.

Usage

cache

Format

A data frame with 5257 rows and 11 variables:

tema Main topic

subtemaI Subtopic

subtemaII third level of the topic

datos publicadosI fourth level of the topic

datos publicadosII fifth level of the topic

apijson url of the table

lista_tablas tables list

titulo title

origen source

encuesta Survey title

ID Identificator ...

Details

This data was updated on November 18, 2017

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codes2labes *Format data of* istacbase_get *return from codes to labels*

Description

change the data of dataframe returned by istacbase_get from the code gived by th ISTAC API to the labels gived them.

Usage

codes2labes(datos_lista, df)

Arguments

datos_lista	a list given by [istacbase_get](#)
df	a data frame with data in Code format.

Value

a data frame with the column names changed accordingly

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istacbase	*Download data from the ISTACBASE API*

Description

This function downloads the requested information using the ISTACBASE API.

Usage

```
istacbase(istacbase_table, islas = "all", label = TRUE,
  POSIXct = FALSE, startdate, enddate, freq, mrv, cache)
```

Arguments

istacbase_table

Character string with the ID of the table requested. This ID corresponds to the ID column from [cache](#).

islas	Character vector of islands name requested. Default value is special code of all. Valid values for islands are: El Hierro, La Palma, La Gomera, Tenerife, Gran Canaria, Fuerteventura and Lanzarote.
label	if FALSE, the data frame returned has the codes used in ISTACBASE API, if TRUE, the data frame returned has the labels used in ISTACBASE API. Default value is FALSE.
POSIXct	if TRUE, additonal columns fecha and periodicidad are added. fecha converts the default date into a [POSIXct](#). periodicidad denotes the time resolution that the date represents. Useful for freq filter, If FALSE, these fields are not added.
startdate	Numeric. Must be in %Y form (i.e. four digit year).
enddate	Numeric. Must be in %Y form (i.e. four digit year).
freq	Character String. For fetching yearly ("anual"), biannual ("semestral"), quaterly ("trimestral"), monthly("mensual"), bi-weekly("quincenal"), weekly("semanal") values. Currently works along with mrv.
mrv	Numeric. The number of Most Recent Values to return. A replacement of startdate and enddate, this number represents the number of observations you which to return starting from the most recent date of collection.
cache	Data frame with tables from ISTACBASE API.

Value

Data frame with all available requested data.

Note

The `POSIXct` parameter requries the use of [lubridate](#) (>= 1.5.0). All dates are rounded down to the floor. For example a value for the year 2016 would have a `POSIXct` date of `2016-01-01`. If this package is not available and the `POSIXct` parameter is set to `TRUE`, the parameter is ignored and a `warning` is produced.

`startdate`, `enddate`, `freq`, `mrv` with POSISXct=FALSE are ignored when POSCIXct is set to FALSE. and a `warning` is produced.

Examples

```
# Percentiles de renta disponible (año anterior al de la entrevista) por hogar en Canarias y años.
istacbase("soc.cal.enc.res.3637")

# query using startdate and enddate
# Percentiles de renta disponible (año anterior al de la entrevista) por hogar en Canarias y años.
istacbase("soc.cal.enc.res.3637", POSIXct = TRUE, startdate = 2010, enddate = 2015)


# query using \code{islas} filter
# Población según sexos y edades año a año. Islas de Canarias y años.
istacbase("dem.pob.exp.res.35", islas = "Fuerteventura")

# if you want the most recent values
istacbase("dem.pob.exp.res.35", POSIXct = TRUE, mrv = 4)
```

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istacbaseperiodos2POSIXct

Add a POSIXct dates to a ISTACBASE API return

Description

Add a POSIXct date column as well as a column with the appropreiate granularity to a ISTACBASE API return

Usage

```
istacbaseperiodos2POSIXct(df, date_col)
```

Arguments

df	data frame returned from API call
date_col	name of the current date field

Value

If the package lubridate (>= 1.5.0) is available the original data frame with two new columns, `fecha` and `periodicidad` is returned. If the above package is not available, the orignal data frame is returned unaltered with an additional warning message.

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istacbase_get	*Call the ISTACBASE API and return a formatted data frame*

Description

This function calls the ISTACBASE API, capture the data in json format and return a list with data in json format and a formatted data frame.

Usage

```
istacbase_get(indicador)
```

Arguments

indicador   A character string. The `ID` code of the requested table. Normally gived by the [istacbase_search](#) function.

Details

To be used inside of [istacbase](#)

Value

A list with data in json format and a formatted data frame.

Examples

```
# Percentiles de renta disponible (año anterior al de la entrevista) por hogar en Canarias y años.
istacbase_get("soc.cal.enc.res.3637")
```

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istacbase_search   *Search information about data available through ISTACBASE API*

Description

This funcion allows finds those tables that match the search term and returns a data frame with results

Usage

```
istacbase_search(pattern, fields = "titulo", extra = TRUE,
  exact = FALSE, cache)
```

Arguments

pattern	Character string or regular expression to be matched.
fields	Character vector of column name through which to search.
extra	if FALSE, only the namecode and title are returned, if TRUE, all columns of the cache are returned.
exact	Search for the exact pattern.
cache	Data frame with metadata about API and ISTAC information.

Value

Data frame with metadata that match the search term.

Examples

```
istacbase_search(pattern = "superficie")
istacbase_search(pattern = "superficie", extra = TRUE)

istacbase_search(pattern = "medio ambiente", fields = "tema")
istacbase_search(pattern = "medio ambiente", fields = "tema", extra = TRUE)

# with regular expression operators
# 'islote' OR 'roque'
istacbase_search(pattern = "islote|roque")
```

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