Package 'blsAPI'

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Title Request Data from the U.S. Bureau of Labor Statistics API

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Description Allows users to request data for one or multiple series through the U.S. Bureau of Labor Statistics API. Users provide parameters as specified in <https://www.bls.gov/developers/api_signature.htm> and the function returns a JSON string.

Depends R (>= 3.1.1)

Imports rjson, httr

License GPL (>= 2)

LazyData true

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R topics documented:

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blsAPI   *Request Data from the U.S. Bureau Of Labor Statistics API*

Description

Allows users to request data for one or multiple series through the U.S. Bureau of Labor Statistics API. Users provide parameters as specified in <https://www.bls.gov/developers/api_signature.htm> and the function returns a JSON string or data frame.

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Usage

```
blsAPI(payload = NA, api_version = 1, return_data_frame = FALSE)
```

Arguments

payload   a string or a list containing data to be sent to the API.

api_version   an integer for which api version you want to use (i.e. 1 for v1, 2 for v2)

return_data_frame

                  a boolean if you want to the function to return JSON (default) or a data frame.
                  If the data frame option is used, the series id will be added as a column. This is
                  helpful if multiple series are selected.

Details

See <https://www.bls.gov/developers/> and <https://www.bls.gov/developers/api_signature.htm> for more details on the payload.

Examples

```
# These examples are taken from <https://www.bls.gov/developers/api_signature.htm>
library(rjson)
library(blsAPI)

# API Version 1.0 R Script Sample Code
# Single Series request
response <- blsAPI('LAUCN040010000000005')
json <- fromJSON(response)
## Not run:
# Multiple Series
payload <- list('seriesid'=c('LAUCN040010000000005','LAUCN040010000000006'))
response <- blsAPI(payload)
json <- fromJSON(response)

# One or More Series, Specifying Years
payload <- list(
 'seriesid'=c('LAUCN040010000000005','LAUCN040010000000006'),
 'startyear'=2010,
 'endyear'=2012)
response <- blsAPI(payload)
json <- fromJSON(response)

# API Version 2.0 R Script Sample Code
# Single Series
response <- blsAPI('LAUCN040010000000005', 2)
json <- fromJSON(response)
# Or request a data frame
df <- blsAPI('LAUCN040010000000005', 2, TRUE)

# Multiple Series
payload <- list('seriesid'=c('LAUCN040010000000005','LAUCN040010000000006'))
response <- blsAPI(payload, 2)
```

```
json <- fromJSON(response)

# One or More Series with Optional Parameters
payload <- list(
  'seriesid'=c('LAUCN040010000000005','LAUCN040010000000006'),
  'startyear'=2010,
  'endyear'=2012,
  'catalog'=FALSE,
  'calculations'=TRUE,
  'annualaverage'=TRUE,
  'registrationKey'='995f4e779f204473aa565256e8afe73e')
response <- blsAPI(payload, 2)
json <- fromJSON(response)

## End(Not run)
```

blsQCEW	*Request QCEW Data from the U.S. Bureau Of Labor Statistics Open Data Access*

Description

Allows users to request quarterly census of employment and wages (QCEW) data from the U.S. Bureau of Labor Statistics open access. Users provide parameters and the function returns a data frame. This function is based off of the sample code developed by the BLS that is found at <https://www.bls.gov/cew/doc/access/data_access_examples.htm>.

Usage

```
blsQCEW(method, year = NA, quarter = NA, area = NA, industry = NA,
  size = NA)
```

Arguments

method	a string describing which type of data you want requested. Valid options are: Area, Industry and Size. The method is not case sensitive.
year	a string for the year of data you want
quarter	a string indicating the quarter (1, 2, 3 or 4) or "a" for the annual average.
area	a string indicating which area you want the data for. See <https://www.bls.gov/cew/doc/titles/area/area_titles.htm> for all area codes and titles.
industry	a string for the NAICS code. Some industry codes contain hyphens but the open data access uses underscores instead of hyphens. So 31-33 becomes 31_33. For all industry codes and titles see: <https://www.bls.gov/cew/doc/titles/industry/industry_titles.htm>
size	a string for the size code. See <https://www.bls.gov/cew/doc/titles/size/size_titles.htm> for all establishment size classes and titles. Note: Size data is only available for the first quarter of each year.

Details

This function is a wrapper for multiple data request methods. See code examples for which parameters are required for which methods. Visit <<https://www.bls.gov/cew/opendata.htm>> for an overview of the BLS's open data access.

Examples

```
# These examples are taken from the sample code examples found at:
# <https://www.bls.gov/cew/doc/access/data_access_examples.htm>

# Area Data Request

# Required parameters are:
#  * year
#  * quarter
#  * area

# Example: Request the first quarter of 2017 for the state of Michigan
MichiganData <- blsQCEW('Area', year='2017', quarter='1', area='26000')
## Not run:
# Industry Data Request

# Required parameters are:
#  * industry
#  * quarter
#  * year

# Example: Request Construction data for the first quarter of 2017
Construction <- blsQCEW('Industry', year='2017', quarter='1', industry='1012')

# Size Data Request
#  * size
#  * year

# Example: Request data for the first quarter of 2017 for establishments with
# 100 to 249 employees
SizeData <- blsQCEW('Size', year='2017', size='6')

## End(Not run)
```

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