

Package ‘EIAdata’

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Type Package

Title R Wrapper for the Energy Information Administration (EIA) API

Version 0.0.1

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Description An R wrapper to allow the user to query categories and Series IDs, and import data, from the EIA's API.

Depends R (>= 2.11.0), XML, plyr, xts, zoo

License GPL-2

NeedsCompilation no

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EIAdata-package *R wrapper for the US Energy Information Administration's (EIA's) API.*

Description

This package allows the user to query categories, and import data, through the EIA's API. Resulting time series are objects of class xts.

Details

Package: EIAdata
Type: Package
Version: 0.0.1
Date: 2014-08-04
License: GPL-2

Author(s)

Matthew Brigida

Maintainer: Matthew Brigida <matt@complete-markets.com>

References

<http://www.eia.gov/beta/api/>

Examples

```
# Be sure to load your EIA key. EIA keys are free. You can request one
# here: http://www.eia.gov/beta/api/register.cfm

key <- "your_key"

# To see the top of the data category hierarchy.

getCatEIA(key=key)

# To see the subcategories and data sets in a particular category (for example 40827).

getCatEIA(key=key, cat=40827)

# To download and return a time series object of class xts
# for example ELEC.PLANT.GEN.13-WAT-ALL.Q
```

```

getQEIA(ID = "ELEC.PLANT.GEN.13-WAT-ALL.Q", key = key)

# The if the EIA series ID contains a "-", the function will replace
# this with a ".". So the call above will return a time series of
# class xts named ELEC.PLANT.GEN.13.WAT.ALL.Q

```

getCatEIA	<i>A function to view the sub and parent categories of an Energy Information Administration (EIA) API data category.</i>
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Description

A function to view the sub and parent categories of a EIA API data category. The function will return Series IDs in a category if present.

Usage

```
getCatEIA(key, cat = 999999999)
```

Arguments

key	Your EIA API key, in quotes.
cat	An EIA API data category number.

Author(s)

Matthew Brigida

Examples

```

## The function is currently defined as
function (key, cat = 999999999)
{
  key <- unlist(strsplit(key, ";"))
  ifelse(cat == 999999999, url <- paste("http://api.eia.gov/category?api_key=",
    key, "&out=xml", sep = ""), url <- paste("http://api.eia.gov/category?api_key=",
    key, "&category_id=", cat, "&out=xml", sep = ""))
  doc <- xmlParse(file = url, isURL = TRUE)
  print("#####Parent Category#####")
  tryCatch(print(xmlToDataFrame(nodes = getNodeSet(doc, "//category/parent_category_id")),
    warning = function(w) FALSE, error = function(w) FALSE)
  print("#####Sub-Categories#####")
  print(xmlToDataFrame(nodes = getNodeSet(doc, "//childcategories/row")))
  print("#####Series IDs#####")
  print(xmlToDataFrame(nodes = getNodeSet(doc, "//childseries/row")))
}

```

getEIA	<i>A function to download data from the Energy Information Administration's (EIA's) API.</i>
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Description

A function to download data from the EIA's API. Resulting time series are of class xts.

Usage

```
getEIA(ID, key)
```

Arguments

ID	The EIA API Series ID for the data.
key	Your EIA API key.

Value

xts object (time series)

Author(s)

Matthew Brigida

Examples

```
## The function is currently defined as
function (ID, key)
{
  switch(.last_char(ID), A = .getAnnEIA(ID, key = key), Q = .getQEIA(ID,
    key = key), M = .getMonEIA(ID, key = key), W = .getWDEIA(ID,
    key = key), D = .getWDEIA(ID, key = key),
    print("ERROR: The last
    character of your ID is not one of the possible sampling
    frequencies (A, Q, M, W, or D)")
  )
}
```

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