

Package ‘alphavantager’

March 31, 2023

Title Lightweight Interface to the Alpha Vantage API

Version 0.1.3

Description Alpha Vantage has free historical financial information.

All you need to do is get a free API key at <<https://www.alphavantage.co>>.

Then you can use the R interface to retrieve free equity information.

Refer to the Alpha Vantage website for more information.

URL <https://github.com/business-science/alphavantager>

BugReports <https://github.com/business-science/alphavantager/issues>

License GPL (>= 3)

Encoding UTF-8

Depends R (>= 3.3.0)

Imports dplyr (>= 0.7.0), glue (>= 1.1.1), httr (>= 1.2.1), jsonlite (>= 1.5), purrr (>= 0.2.2.2), readr (>= 1.1.1), stringr (>= 1.2.0), tibble (>= 1.3.3), tidyr (>= 0.6.3), timetk (>= 0.1.1.1)

Suggests testthat, knitr

RoxygenNote 7.2.3

NeedsCompilation no

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alphavantager

alphavantager: A lightweight R interface to the Alpha Vantage API

Description

A lightweight R interface to the Alpha Vantage API

Details

The alphavantager package provides a lightweight interface to the Alpha Vantage API. Alpha Vantage is a free source for financial data that in many cases is more accurate than Yahoo Finance and Google Finance. Get a free API KEY at <https://www.alphavantage.co>. Then use the R interface functions `av_api_key("YOUR_KEY")` to set the API key and the `av_get()` function to get financial data.

av_api_key

Set the Alpha Vantage API Key

Description

Set the Alpha Vantage API Key

Usage

```
av_api_key(api_key)
```

Arguments

`api_key` A character string with your Alpha Vantage API Key.

Details

The Alpha Vantage API key must be set prior to using `av_get()`. You can obtain an API key at the [Alpha Vantage Website](#).

Value

Invisibly returns API key once set. Use print method to view.

See Also

[av_get\(\)](#)

Examples

```
## Not run:
av_api_key("YOUR_API_KEY")
av_get(symbol = "MSFT", av_fun = "TIME_SERIES_INTRADAY", interval = "15min", outputsize = "full")

## End(Not run)
```

 av_get

Get financial data from the Alpha Vantage API

Description

Get financial data from the Alpha Vantage API

Usage

```
av_get(symbol, av_fun, ...)
```

Arguments

symbol	A character string of an appropriate stock or fund. See parameter "symbol" in Alpha Vantage API documentation .
av_fun	A character string matching an appropriate Alpha Vantage "function". See parameter "function" in Alpha Vantage API documentation .
...	Additional parameters passed to the Alpha Vantage API. For a list of parameters, visit the Alpha Vantage API documentation .

Details

The av_fun argument replaces the API parameter “function” because function is a reserved name in R. All other arguments match the Alpha Vantage API parameters.

There is no need to specify the apikey parameter as an argument to av_get(). The required method is to set the API key using av_api_key("YOUR_API_KEY").

There is no need to specify the datatype parameter as an argument to av_get(). The function will return a tibble data frame.

Some data sets only return 100 rows by default. Change the parameter outputsize = "full" to get the full dataset.

Get more than one symbol. The Alpha Vantage API is setup to return one symbol per API call. Use the tidyquant::tq_get() API to get multiple symbols.

ForEx "FROM/TO" symbol details. FOREX symbols in the av_get() function are supplied in "FROM/TO" format, which are then parsed in the Alpha Vantage API into from_currency and to_currency API parameters. Usage example: av_get(symbol = "EUR/USD", av_fun = "FX_DAILY")

Value

Returns a tibble of financial data

See Also

[av_api_key\(\)](#)

Examples

```
## Not run:

# SETUP API KEY
av_api_key("YOUR_API_KEY")

# ---- 1.0 STOCK TIME SERIES ----

# 1.1 TIME SERIES INTRADAY
av_get("MSFT", av_fun = "TIME_SERIES_INTRADAY", interval = "5min", outputsize = "full")

# 1.2 TIME SERIES DAILY ADJUSTED
av_get("MSFT", av_fun = "TIME_SERIES_DAILY_ADJUSTED", outputsize = "full")

# 1.3 QUOTE ENDPOINTS
av_get("MSFT", av_fun = "GLOBAL_QUOTE")

# ---- 2.0 FOREX ----

# 2.1 CURRENCY EXCHANGE RATES
av_get("EUR/USD", av_fun = "CURRENCY_EXCHANGE_RATE")

# 2.2 FX INTRADAY
av_get("EUR/USD", av_fun = "FX_INTRADAY", interval = "5min", outputsize = "full")

# 2.3. FX DAILY
av_get("EUR/USD", av_fun = "FX_DAILY", outputsize = "full")

# ---- 3.0 TECHNICAL INDICATORS ----

# 3.1 SMA
av_get("MSFT", av_fun = "SMA", interval = "weekly", time_period = 10, series_type = "open")

# ---- 4.0 SECTOR PERFORMANCE ----

# 4.1 Sector Performance
av_get(av_fun = "SECTOR")

## End(Not run)
```

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