

Package ‘Euronext’

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Title Retrieve Historical Data of Companies Listed on the 'Euronext' Stock Exchange

Version 2.0.2

Description Provides seamless access to historical data of companies listed on the 'Euronext' Stock Exchange (<<https://live.euronext.com/en>>), enabling users to retrieve real-time information directly within the R environment. With functions tailored for data retrieval and manipulation, users can effortlessly access a wide range of financial data, including stock prices, trading volumes, and more. Leveraging the power of R, this package facilitates efficient analysis and visualization of stock market trends, aiding investors, analysts, and researchers in making informed decisions. By combining ease of use with comprehensive data access, 'Euronext' empowers R users to delve deep into the dynamics of European financial markets, offering valuable insights for various financial applications.

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URL <https://rpubs.com/Fredysessie/euronext>

BugReports <https://github.com/Fredysessie/Euronext/issues>

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R topics documented:

EN_Bonds_List	2
EN_Bonds_List_bis	3

EN_Etfs_List	4
EN_Etfs_List_bis	5
EN_Funds_List	6
EN_GetISIN	7
EN_GetISIN_B	8
EN_GetISIN_Etf	9
EN_GetISIN_F	10
EN_GetProfile	11
EN_Get_News	13
EN_Get_OB	15
EN_HistData	16
EN_HistData_bis	18
EN_Indices_List	20
EN_intraday_Data	21
En_Market.Sumarry	22
EN_OrderBook.Chart	24
EN_Overview_plot	26
EN_Performers.Settings	28
EN_plot	29
EN_P_Ticker_adn	31
EN_Stock.Performers	32
EN_Stocks_List	34
EN_Ticker_hcData	35
EN_Ticker_infos	37
EN_Ticker_Performance	38

Index**41**

<i>EN_Bonds_List</i>	<i>Get the list of Bonds quoted on Euronext markets</i>
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Description

This function retrieves information about Bonds quoted on Euronext markets.

Usage

```
EN_Bonds_List(tot_page = 5)
```

Arguments

tot_page Total number of pages to retrieve. It can be a numerical value, 'Max' to designate the maximum number of pages, or the default value is 5.

Value

A data frame containing information about Bonds, including name, ticker, ISIN code, market, last price, percentage change, and URL.

See Also

[EN_Stocks_List](#) to get the list tickers infos quoted on a given Euronext Stock, [EN_Funds_List](#) for Funds list, [EN_Indices_List](#) for Indexes list, [EN_Etfs_List](#) for Etfs list

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)

dt_ = EN_Bonds_List(10) # To show only 10 pages
print(dt_)

dt_ = EN_Bonds_List() # To show only 5 pages by default
print(dt_)

# dt_ = EN_Bonds_List('Max') #To show all the bonds list
# print(dt_)
```

EN_Bonds_List_bis *Get the list of Bonds quoted on Euronext markets (Bis)*

Description

This function retrieves information about Bonds quoted on Euronext markets.

Usage

```
EN_Bonds_List_bis(target_page = 1)
```

Arguments

target_page	Target page to retrieve. It can be a numerical value, 'Max' to designate the last pages, or the default value is 1 (which means first page). Unlike the function EN_Bonds_List , this function allows you to specify a target page to retrieve from the list of Bonds. For example, <code>EN_Bonds_List_bis(5)</code> fetches only the fifth page of the Bonds list, providing a more granular control over the data retrieval process.
-------------	--

Value

A data frame containing information about Bonds, including name, ticker, ISIN code, market, last price, percentage change, and URL.

See Also

[EN_Stocks_List](#) to get the list tickers infos quoted on a given Euronext Stock, [EN_Funds_List](#) for Funds list, [EN_Indices_List](#) for Indexes list, [EN_Etfs_List](#) for Etfs list
 Other Infos Retrieval: [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#),
[EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#),
[EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)

dt_ = EN_Bonds_List_bis() # To show only the 1st page, it is the defaut paramater
print(dt_)

dt_ = EN_Bonds_List_bis(10) # To show only the 10th page
print(dt_)

dt_ = EN_Bonds_List_bis('Max') # To show only last page
print(dt_)
```

EN_Etfs_List

Get the list of Etfs quoted on Euronext markets

Description

This function retrieves information about Etfs quoted on Euronext markets.

Usage

```
EN_Etfs_List(tot_page = 5)
```

Arguments

tot_page	Total number of pages to retrieve. It can be a numerical value, 'Max' to designate the maximum number of pages, or the default value is 5.
----------	--

Value

A data frame containing information about Etfs, including name, ticker, ISIN code, market, last price, percentage change, and URL.

See Also

[EN_Stocks_List](#) to get the list tickers infos quoted on a given Euronext Stock, [EN_Bonds_List](#) for Bonds list, [EN_Indices_List](#) for Indexes list, [EN_GetISIN_Etf](#) to get the ADN(Isin and Market identifier) of a givin Etf.

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)

dt_ = EN_Etfs_List(1) # To show only 1 page ie recent 100 bonds list
print(dt_)

dt_1 = EN_Etfs_List() # To show only 5 pages ; default parameter
tail(dt_1)

dt_max = EN_Etfs_List("Max") # To show the list of all Etfs listed on Euronext
head(dt_max)
```

EN_Etfs_List_bis *Get the list of Etfs quoted on Euronext markets (bis)*

Description

This function retrieves information about Etfs quoted on Euronext markets.

Usage

```
EN_Etfs_List_bis(target_page = 1)
```

Arguments

`target_page` Target page to retrieve. It can be a numerical value, 'Max' to designate the last pages, or the default value is 1 (which means first page).
 Unlike the function [EN_Etfs_List](#), this function allows you to specify a target page to retrieve from the list of Etfs. For example, `EN_Etfs_List_bis(5)` fetches only the fifth page of the Etfs list, providing a more granular control over the data retrieval process.

Value

A data frame containing information about Etfs, including name, ticker, ISIN code, market, last price, percentage change, and URL.

See Also

[EN_Stocks_List](#) to get the list tickers infos quoted on a given Euronext Stock, [EN_Bonds_List](#) for Bonds list, [EN_Indices_List](#) for Indexes list, [EN_GetISIN_Etf](#) to get the ADN(Isin and Market identifier) of a givin Etf.

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
dt_ = EN_Etfs_List_bis(5) # To show only the 5th page of Etfs (100 Etfs)
print(dt_)

dt_1 = EN_Etfs_List_bis() # To show the 1st page of Etfs List
tail(dt_1)

dt_max = EN_Etfs_List_bis("Max") #To show only the last page of quoted Etfs
head(dt_max)
```

EN_Funds_List

Get the list of funds quoted on Euronext markets

Description

This function retrieves information about funds quoted on Euronext markets. No input parameters are required for this function. It retrieves information about Funds quoted on Euronext markets

Usage

`EN_Funds_List()`

Value

A data frame containing information about funds, including name, ticker, ISIN code, market, last price, percentage change, and URL.

See Also

[EN_Stocks_List](#) to get the list tickers infos quoted on a given Euronext Stock, [EN_Bonds_List](#) for Bonds list, [EN_Indices_List](#) for Indexes list, [EN_Etfs_List](#) for Etfs list

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)

dt_ = EN_Funds_List()
print(dt_)
```

EN_GetISIN

Get DNA (Concatenated form of "ISIN"- "Market Identifier") of a Stock or an Index listed on Euronext

Description

This function retrieves the DNA (concatenated form of "ISIN"- "Market Identifier") of a Stock or an Index listed on Euronext using the provided Symbol/Name/ISIN of a Stock or an Index. The function formats the ticker to uppercase and makes an API request to Euronext to get the corresponding ISIN.

Usage

```
EN_GetISIN(ticker)
```

Arguments

ticker	A character string representing the Stock's or an Index's ticker, name, or ISIN.
--------	--

Value

A character string representing the DNA of the Stock or an Index.

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)

# Get ISIN for the ticker "4DDD"
EN_GetISIN("4DDD")

# Get ISIN for the ticker "ADS MARITIME HOLD"
EN_GetISIN("ADS MARITIME HOLD")

# Get ISIN for ATENOR company
EN_GetISIN("BE0003837540")

# Get ISIN for AEX All-Share Index GR
EN_GetISIN("AEX All-Share Index GR")

# Get DNA of AEX Health Care Index
EN_GetISIN("NLHC")
```

EN_GetISIN_B

Get the DNA (ISIN and Market identifier) of a ticker from the Bonds list

Description

This function checks if the provided ticker is present in the specified columns of the Bonds list. If the ticker is found in the Bonds list, the function returns the DNA (ISIN and Market identifier) of the corresponding ticker. Otherwise, it returns 'Ticker not found'.

Usage

```
EN_GetISIN_B(ticker)
```

Arguments

ticker	The ticker to search for.
--------	---------------------------

Value

A character

See Also

[EN_GetISIN](#) to get DNA of a giving Company or Index Ticker/Name/ISIN (Fund, Bond, and ETF are excluded), [EN_Bonds_List](#) to get the list of Bonds quoted on Euronext, [EN_GetISIN_Etf](#) to get a giving Eft DNA, [EN_GetISIN_F](#) to get a giving Fund DNA.

Other ISIN Retrieval: [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#)

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)

the_dna1 = EN_GetISIN_B("ABN AMRO BANK N.V.") #To get only the DNA of all same bonds issuerd
the_isin1 = sub("-.*", "", the_dna1) #To get only the ISINs
print(the_isin1)

the_dna2 = EN_GetISIN_B("A2A GREEN BOND TF")
the_isin2 = sub("-.*", "", the_dna2) #To get only the ISIN
print(the_isin2)
```

EN_GetISIN_Etf

Get the DNA (ISIN and Market identifier) of a ticker from the ETFs list

Description

This function checks if the provided ticker is present in the specified columns of the ETFs list. If the ticker is found in the ETFs list, the function returns the DNA (ISIN and Market identifier) of the corresponding ticker. Otherwise, it returns 'Ticker not found'.

Usage

```
EN_GetISIN_Etf(ticker)
```

Arguments

ticker	The ticker to search for.
--------	---------------------------

Value

A character

See Also

[EN_GetISIN](#) to get DNA of a giving Company or Index Ticker/Name/ISIN (Fund, Bond, and ETF are excluded), [EN_Etfs_List](#) to get the list of ETFs quoted on Euronext, [EN_GetISIN_B](#) to get a giving Bond DNA, [EN_GetISIN_F](#) to get a giving Fund DNA.

Other ISIN Retrieval: [EN_GetISIN_B\(\)](#), [EN_GetISIN_F\(\)](#)

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)

the_dna = EN_GetISIN_Etf("AAPL")
sub("-.*", "", the_dna) #To get only the ISIN

# Get ETF '-1X SHORT DIS' DNA
EN_GetISIN_Etf("-1X SHORT DIS")

# Get ETF '3x Long Coinbase' DNA
EN_GetISIN_Etf("XS2399367254")
```

EN_GetISIN_F

Get the DNA (ISIN and Market identifier) of a ticker from the funds list

Description

This function checks if the provided ticker is present in the specified columns of the funds list. If the ticker is found in the funds list, the function returns the DNA (ISIN and Market identifier) of the corresponding ticker. Otherwise, it returns 'Ticker not found'.

Usage

```
EN_GetISIN_F(ticker)
```

Arguments

ticker	The ticker to search for.
--------	---------------------------

Value

A character

See Also

[EN_GetISIN](#) to get DNA of a giving Company or Index Ticker/Name/ISIN (Fund, Bond, and ETF are excluded), [EN_Funds_List](#) to get the list of funds quoted on Euronext markets, [EN_GetISIN_B](#) to get a giving Bond DNA, [EN_GetISIN_Etf](#) to get a giving ETF DNA.

Other ISIN Retrieval: [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#)

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(stringr)
library(jsonlite)

the_dna = EN_GetISIN_F("ACOMEA GLOBALE")
sub("-.*", "", the_dna) #To get only the ISIN

# Get Fund 'ASNU SMALL MIDCAPF' DNA
asnu_dna <- EN_GetISIN_F("ASN5")
print(asnu_dna)

# Get Fund 'COMPAM ACTIVE GLOB' DNA
EN_GetISIN_F("LU1275425897")
```

EN_GetProfile

Retrieve the profile (characteristics) of a specified Equity, Index, Fund, ETF, or Bond listed on Euronext.

Description

This function retrieves the characteristic elements of a Stock, Index, Etfs, Fund or Bond listed on Euronext using the provided Symbol/Name/ISIN or DNA.

Usage

```
EN_GetProfile(ticker, stock_type = "Eq_Ind")
```

Arguments

ticker	A character string representing the Stock's or an Index's ticker, name, or ISIN.
stock_type	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.

Value

A List (Name, ISIN, DNA, Symbol) representing the DNA of the Stock or an Index.

Examples

```

library(httr)
library(jsonlite)
library(rvest)
library(stringr)
library(magrittr)

# Note: For Equity, Index, Fund, and ETF, provide the giving Symbol, ISIN,
# Name, or DNA for best results, but for a Bond, provide its DNA and
# sometimes its Name for best results because a company or country
# can issue more than one Bond.

## Equities
# Example a : '3D SYSTEMS CORP' equity
EN_GetProfile("4ddd") # By providing Symbol

# Example b : 'ALFEN' equity
EN_GetProfile("NL0012817175") # By providing ISIN

# Example c : 'LES HOTELS BAVEREZ' equity
EN_GetProfile("LES HOTELS BAVEREZ") # By providing Name

# Example d : 'BE SEMICONDUCTOR' equity
EN_GetProfile("NL0012866412-XAMS") # By providing DNA

## Indices
# Example a : 'AEX CONS STAPL GR' Index
EN_GetProfile("NLCSG") # By providing Symbol

# Example b : 'AEX All-Share Index' Index
EN_GetProfile("NL0000249100") # By providing ISIN

# Example c : 'Euronext Core Europe 30 EW Decrement 5% NR' Index
EN_GetProfile("EN CE EW30 D 5% NR") # By providing Name

# Example d : 'SBF 120 NR' Index
EN_GetProfile("QS0011131842-XPAR") # By providing DNA


# Funds
# Example a : 'ACOMEA PERFORMANCE' Fund
EN_GetProfile("ACAPER", stock_type = 'F') # By providing Symbol

# Example b : 'BNP ESGNL' Fund
EN_GetProfile("BNP ESGNL", stock_type = 'F') # By providing Name

```

```

# Example c : 'SWIF2' Fund
EN_GetProfile("NL0015000W40", stock_type = 'F') # By providing ISIN of SWIF2

# Example d : 'GOLDMAN SACHS PARAPLUFONDS 2 N' Fund
EN_GetProfile("NL0000293181-XAMS", stock_type = 'F') # By providing DNA of GSMD5

## ETFs
# Example a : 'Asia IG Corp US A' Etf
EN_GetProfile("$Asia IG Corp US A", stock_type = 'E') # By providing Name

# Example b : '1X MSFT' Etf
EN_GetProfile("MSFT", stock_type = 'E') # By providing Symbol

# Example c : '3X LONG COINBASE' Etf
EN_GetProfile("XS2399367254", stock_type = 'E') # By providing ISIN of 3X LONG COINBASE

# Example d : '3X PLTR' Etf
EN_GetProfile("XS2663694680-XAMS", stock_type = 'E') # By providing DNA

# Examples for Bonds
# Example a: 'A2A SLB TF 0,625%' Bond
EN_GetProfile("XS2364001078-XMOT", stock_type = 'B') # By providing DNA

# Example b: 'AAB1.50%30SEP30' Bond
EN_GetProfile("AAB1.50%30SEP30", stock_type = 'B') # By providing Name

```

EN_Get_News*Get Ticker latest news (recent information)***Description**

This function retrieves the update information of a company listed on the Euronext exchange based on its ticker symbol. It returns a table with details such as its real Name, ISIN, Last traded Price, Date of last update, and other relevant informations.

Usage

```
EN_Get_News(ticker, escape = FALSE, stock_type = "Eq_Ind")
```

Arguments

ticker	A character string representing the company's ticker, name, or ISIN.
escape	Boolean, either TRUE or FALSE. If escape is True, it means you're providing the DNA (ISIN-Market identifier) directly. Giving T to escape is helpful to avoid time-consuming operations; otherwise, F means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.

<code>stock_type</code>	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.
-------------------------	--

Value

A data frame containing historical performance data of the specified company. If the ticker is not found, it returns the message "Ticker not found."

See Also

[EN_GetISIN](#) to get DNA of a giving Company or Index Ticker/Name/ISIN (Fund, Bond, and ETF are excluded), [EN_GetISIN_Etf](#) to get the ISIN of a giving ETFs DNA, [EN_GetISIN_B](#) to get a giving Bond DNA, [EN_GetISIN_F](#) to get a giving Fund DNA.

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
library(httr)
library(httr2)
library(rvest)
library(jsonlite)
library(stringr)
library(rlang)

# Equities ex "NL0000852564-XAMS"
# Stock AALBERTS N.V.
equity_new <- EN_Get_News("NL0000852564-XAMS", escape = TRUE)
print(equity_new)

#ABO GROUP ENVIRONMENT Stock
equity_new1 <- EN_Get_News("ABO")
print(equity_new1)

# Indexes
# AEX All-Share Index GR
index_new <- EN_Get_News("QS0011224977-XAMS", escape = TRUE)
print(index_new)
# AEX X12 Short GR Index
index_new1 <- EN_Get_News("AE12S")
print(index_new1)

# Fund
# Fund KEMPEN ORANGE FUND N.V.
fund_new <- EN_Get_News("KORAF", stock_type = "F")
print(fund_new)
```

```

# Fund of ASN DUURZAAM MIXFONDS ZEER DEFENSIEF
fund_new1 <- EN_Get_News("NL0014270274-XAMS", escape = TRUE, stock_type = "F")
print(fund_new1)

# Etfs cases
# 21Shares Stacks Staking ETP
etf_new <- EN_Get_News("CH1258969042-XAMS", escape = TRUE, stock_type = 'E')

# Leverage Shares 2x Long Berkshire Hathaway (BRK-B) ETP Securities
etf_new1 <- EN_Get_News("2BRK", stock_type = "E")

# Bond A2A 1.75% CALL 25FB25
bd_new <- EN_Get_News("XS1195347478-ETLX", escape = TRUE)
print(bd_new)
# Bond AAB0.45%12DEC2036
bd_new1 <- EN_Get_News("XS2093705064-XAMS", escape = TRUE)
print(bd_new1)

```

EN_Get_OB*Get Order Book Data***Description**

This function retrieves the order book data for a given stock or Etf ticker on the Euronext exchange. It provides information about the buy and sell orders, including the order quantity and price. The data is returned as a data frame with columns representing buy (bid) and sell (ask) orders. The last row of the data frame contains the sum of elements for each column (excluding "Bid_Price" and "Ask_Price" columns marked with "-").

Usage

```
EN_Get_OB(ticker, stock_type = "Equity")
```

Arguments

ticker	A character string representing the company's (Equity or Etf) ticker, name, or ISIN.
stock_type	The type of the ticker: 'Equity' for Stocks and 'Etf' for EFTs.

Value

A data frame containing order book data with columns:

- **B_order:** Buy order number
- **B_quantity:** Buy order quantity
- **Bid_Price:** Bid price

- Ask_Price: Ask price
- A_quantity: Ask order quantity
- A_order: Ask order number If the specified ticker is not found, the function returns an error message.

See Also

[EN_GetProfile](#) to retrieve the ISIN or DNA for a given ticker.

Other Data Retrieval: [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(dplyr)
library(magrittr)
library(rvest)
library(stringr)

ABCA_OB = EN_Get_OB("ABCA") # Get ABC ARBITRAGE ticker ORDER BOOK
print(ABCA_OB)

MSFT_OB = EN_Get_OB("MSFT", stock_type = 'Etf')
print(MSFT_OB)

# Get ETf 'AAPL' ORDER BOOK by providing its DNA
# EN_Get_OB("XS2337099563-XAMS", stock_type = 'Etf')

# Get ETf 'LEVERAGE SHARES PLC' ORDER BOOK by providing its DNA
# EN_Get_OB("XS2663694847-XAMS", stock_type = 'Etf')

ALBON_OB = EN_Get_OB("ALBON") # Get LEBON ticker ORDER BOOK
print(ALBON_OB)

EN_Get_OB("ALBONGdg") # Will return "Ticker not found"
```

Description

This function fetches historical stock data from Euronext based on the given ticker symbol. You can specify a date range using the 'from' and 'to' parameters. Additionally, provide the type of the ticker as 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.

Usage

```
EN_HistData(
  ticker,
  from = Sys.Date() - 91,
  to = Sys.Date() - 1,
  stock_type = "Eq_Ind",
  escape = FALSE
)
```

Arguments

ticker	A character string representing the company's ticker, name, or ISIN.
from	The start date for historical data (default: 91 days ago). Only dates not exceeding 2 years ago are allowed for the 'from' parameter.
to	The end date for historical data (default: yesterday).
stock_type	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.
escape	Boolean, either TRUE or FALSE. If escape is True, it means you're providing the DNA (ISIN-Market identifier) directly. Giving T to escape is helpful to avoid time-consuming operations; otherwise, F means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.

Value

A data frame containing historical stock data, including columns for Date, Open, High, Low, Last, Close, 'Number of shares', Turnover, and VWAP.

See Also

[EN_GetISIN](#) to retrieve the ISIN for a given ticker.

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```

library(httr)
library(jsonlite)
library(rvest)
library(stringr)
library(magrittr)
library(rlang)

#To get historical data of Bond issued by IT0005386716-XMOT
hc_RMBS <- EN_HistData("XS1548458014-XAMS", escape = TRUE, from = "2022-10-30", stock_type = "B")
head(hc_RMBS)

# Fetch historical data for ABCA from October 30, 2023, to January 27, 2024
hc_abca <- EN_HistData("ABCA", from = "2023-10-30", to = "2024-01-27")
head(hc_abca)

# Fetch historical data for ETF AAPL from December 15, 2023, to now
hc_aapl <- EN_HistData("AAPL", stock_type = "E", from = "2023-12-15", to = Sys.Date())
head(hc_aapl)

# Fetch historical data for ABCA with the default date range
hc_ABCA <- EN_HistData("ABCA")
head(hc_ABCA)

# To Get KGHDF's Fund data
hc_KGHDF <- EN_HistData("KGHDF", stock_type = "F", from = "2022-10-30")
head(hc_KGHDF)

EN_HistData("ABCahh") # Will return "Ticker not found"

```

Description

This function fetches historical stock data from Euronext based on the given list of tickers or ISINs. You can specify a date range using the 'from' and 'to' parameters. Additionally, provide the type of the ticker as 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for ETFs.

Usage

```
EN_HistData_bis()
```

```

    ticker,
    from = Sys.Date() - 365 * 2,
    to = Sys.Date() - 1,
    stock_type = "Eq_Ind",
    escape = FALSE
)

```

Arguments

<code>ticker</code>	A character vector or list representing the company's ticker, name, or ISIN. It can be a single ticker or a list of tickers.
<code>from</code>	The start date for historical data (default: 2 years ago). Only dates not exceeding 2 years ago are allowed for the 'from' parameter.
<code>to</code>	The end date for historical data (default: yesterday).
<code>stock_type</code>	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for ETFs.
<code>escape</code>	Boolean, either TRUE or FALSE. If escape is TRUE, it means you're providing the DNA (ISIN-Market identifier) directly. Giving TRUE to escape is helpful to avoid time-consuming operations; otherwise, FALSE means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.

Value

A data frame containing historical stock data, including columns for Date, Open, High, Low, Last, Close, 'Number of shares', Turnover, and VWAP.

See Also

[EN_GetISIN](#) to retrieve the ISIN for a given ticker.

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```

library(httr)
library(jsonlite)
library(rvest)
library(stringr)
library(magrittr)
library(rlang)

# Fetch historical data for ABCA , AEDIFICA and BM3EAC stocks from October 30, 2023

```

```

hc_List1 <- EN_HistData_bis(c("ABCA", "AEDIFICA", "BM3EAC"), from = "2023-10-30", to = "2024-01-27")
head(hc_List1)

# Fetch historical data for Indices such us AEX All-Share Index, AEX2S and AEX Basic Materials
hc_List2 <- EN_HistData_bis(c("AAX", "QS0011016480", "AEX2S"), from = "2023-12-15", to = Sys.Date())
head(hc_List2)

#To get historical data of Bond issued by IT0005386716-XMOT
hc_List3 <- EN_HistData_bis("XS1548458014-XAMS", escape = TRUE, from = "2022-10-30", stock_type = "B")
head(hc_List3)

# Fetch historical data for ABCA with the default date range
hc_List3 <- EN_HistData_bis("ABCA")
head(hc_List3)

# To Get KGHDF's Fund data
hc_List4 <- EN_HistData_bis("KGHDF", stock_type = "F", from = "2022-10-30")
head(hc_List4)

#Providing Etfs vector
hc_etf <- EN_HistData_bis(c("IE0007G78AC4", "MANA", "3TSM"), stock_type = 'E')
head(hc_etf)

EN_HistData_bis("ABCahh") # Will return "Ticker not found"

```

EN_Indices_List*Get information about indices listed on Euronext.***Description**

This function retrieves information about indices available on Euronext.

Usage

```
EN_Indices_List()
```

Value

A data frame containing information about the indices, including Name, ISIN, Symbol, Last price, Percentage change, Date and time, Year-to-date percentage change, and a composite Ticker_adn.

See Also

[EN_Stocks_List](#) to get the list of tickers quoted on a given Euronext Stock, [EN_Funds_List](#) for Funds list, [EN_Etfs_List](#) for Etfs list.

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Stocks_List\(\)](#), [En_Market.Sumarry\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)
library(magrittr)
library(rlang)

list_ind <- EN_Indices_List()
head(list_ind[, c(1:5)])
```

EN_intraday_Data

Fetches intraday price data for a specified stock on Euronext.

Description

This function fetches intraday data for a given stock ticker on Euronext. You can specify the type of intraday price to retrieve, either "Today" or "Previous" day. The default type is "Today." The function returns a data frame containing intraday stock information.

Usage

```
EN_intraday_Data(
  ticker,
  day_type = "Today",
  escape = FALSE,
  stock_type = "Eq_Ind",
  nbitems = 30
)
```

Arguments

ticker	A character string representing the stock ticker or name.
day_type	A character string specifying the type of intraday price to fetch. Options are "Today" or "Previous" day. Default is "Today." You can also use 'T' for 'Today' or 'P' for 'Previous'.
escape	Boolean, either TRUE or FALSE. If escape is True, it means you're providing the DNA (ISIN-Market identifier) directly. Giving T to escape is helpful to avoid time-consuming operations; otherwise, F means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.
stock_type	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.
nbitems	An integer specifying the number of items to fetch. Default is 30 (also the maximum).

Value

A data frame containing intraday stock information.

See Also

[EN_GetISIN](#), [EN_HistData](#)

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_plot\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)
library(magrittr)
library(rlang)

# Get recent intraday prices of ABCA share
intra_ = EN_intraday_Data("ABCA", day_type = 'T')
print(intra_)

# Get recent intraday prices of ACOMEA EMERGING Q2 Fund
intra_1 = EN_intraday_Data("IT0005091126", 'F', escape = FALSE, day_type = 'T')
print(intra_1)

# Get Previous intraday prices of ETF AAPL by providing directly the ISIN-Market identifier
intra_2 = EN_intraday_Data("XS2337099563-XAMS", escape = TRUE, day_type = 'Previous')
print(intra_2)

# Get Previous intraday prices of AEX All-Share Index
intra_3 = EN_intraday_Data("AEX All-Share Index GR", day_type = 'P')
print(intra_3)
```

Description

This function retrieves summary data of stock market indices and currency rates from the Euronext website for a selected market. It allows users to obtain real-time information about various financial instruments listed on the Euronext stock exchange, facilitating analysis and decision-making.

Usage

```
En_Market.Sumarry(stock_choice)
```

Arguments

- `stock_choice` A character string specifying the market of interest. Available options include "a" or "amsterdam" for Amsterdam, "b" or "brussels" for Brussels, "d" or "dublin" for Dublin, "l" or "lisbon" for Lisbon, "m" or "milan" for Milan, "p" or "paris" for Paris, and "o" or "oslo" for Oslo.

Value

A list containing summary data for the selected market, including information on stock indices and currency rates. The list includes the following components:

- Indices_summary** A data frame summarizing stock market indices for the selected market. It includes columns for the index name, last price, and percentage change. If the summary is not available, this component will be set to NA.
- EU_indices** A data frame summarizing EURONEXT indices for the selected market. It includes columns for the instrument name, last price, and percentage change. If the summary is not available, this component will be set to NA.
- Currency_rate** A data frame summarizing currency exchange rates for the selected market. It includes columns for the instrument name, last price, and percentage change. If the summary is not available, this component will be set to NA.

See Also

[EN_Stocks_List](#)

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Stocks_List\(\)](#)

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
library(httr)
library(rvest)
library(magrittr)

# Note : 'NA' for a giving summary means the summary is not available

# Retrieve summary data for Amsterdam stock
En_Market.Sumarry("a")
# Or
# Retrieve summary data for 'Amsterdam stock indices' only
En_Market.Sumarry("a")$Indices_summary
```

```

# Retrieve summary data for 'EURONEXT indices' only
En_Market.Sumarry("a")$EU_indices

# Retrieve summary data for 'Currency rate' only
En_Market.Sumarry("a")$Currency_rate

# Retrieve summary data for 'Brussels stock indices' only
En_Market.Sumarry("b")$Indices_summary

# Retrieve summary data for 'Dublin stock indices' only
En_Market.Sumarry("d")$Indices_summary

# Retrieve summary data for 'Lisbon stock indices' only
En_Market.Sumarry("l")$Indices_summary

# Retrieve summary data for 'Milan stock indices' only
En_Market.Sumarry("m")$Indices_summary

# Retrieve summary data for 'Paris stock indices' only
En_Market.Sumarry("p")$Indices_summary

# Retrieve summary data for 'Oslo stock indices' only
En_Market.Sumarry("o")$Indices_summary

```

EN_OrderBook.Chart *Plot Order Book Chart for a Given Ticker*

Description

This function plots an order book chart for a given ticker. It retrieves the order book data using the EN_Get_OB function and then creates a Highchart plot displaying bid and ask prices along with their respective quantities.

Usage

```

EN_OrderBook.Chart(
  ticker,
  stock_type = "Equity",
  bid.col = "darkgreen",
  ask.col = "#FF0000",
  plot_type = "depth"
)

```

Arguments

ticker	The ticker symbol for which the order book chart will be plotted.
stock_type	The type of the ticker: 'Equity' for Stocks and 'Etf' for EFTs.

bid.col	Color for bid prices in the chart. Default is '#00FF00' (green).
ask.col	Color for ask prices in the chart. Default is '#FF0000' (red).
plot_type	Type of visualization ('depth' or 'barh').

Value

A Highchart plot displaying the order book for the provided ticker.

Author(s)

Koffi Frederic SESSIE

See Also

[EN_Get_OB](#) to retrieve the Order Book of a given ticker.

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Plot: [EN_Overview_plot\(\)](#), [EN_plot\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
# Notes : Usually , the function will work perfectly if the ticker is an Equity,
library(httr)
library(highcharter)
library(jsonlite)
library(dplyr)
library(magrittr)
library(rvest)
library(grDevices)
library(stringr)

# Plot ABC ARBITRAGE ticker Order Book BarH chart by providing ISIN
ABCA_OB.chart = EN_OrderBook.Chart("FR0004040608", plot_type = 'barh') #using default colors
ABCA_OB.chart

# Plot LEBON ticker Order Book Chart
ALBON_OB.chart = EN_OrderBook.Chart("ALBON", bid.col = 'cyan', ask.col ='gold')
ALBON_OB.chart

# Order Book depth chart of 'AAPL' Etf
AAPL_OB.chart = EN_OrderBook.Chart("XS2337099563", stock_type = 'Etf')

# Order Book bar chart of 'LEVERAGE SHARES PLC' Etf
```

```
LEV_OB.chart = EN_OrderBook.Chart("XS2663694847", stock_type = 'Etf', plot_type = 'barh')

# The following code Will return an error because the "Ticker" is invalid
# EN_OrderBook.Chart("ALBONgdg")
```

EN_Overview_plot *Euronext OVERVIEW PLOT*

Description

This function will get Ticker(s) data and then plot it.

Usage

```
EN_Overview_plot(
  ticker,
  from = NULL,
  to = Sys.Date() - 1,
  stock_type = "Eq_Ind",
  escape = FALSE,
  up.col = "darkgreen",
  down.col = "red"
)
```

Arguments

<code>ticker</code>	is the Ticker(s) name(s)
<code>from</code>	A quoted start date, ie. "2020-01-01" or "2020/01/01". The date must be in ymd format "YYYY-MM-DD" or "YYYY/MM/DD".
<code>to</code>	A quoted end date, ie. "2022-01-31" or "2022/01/31". The date must be in ymd format "YYYY-MM-DD" or "YYYY/MM/DD"
<code>stock_type</code>	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for ETFs.
<code>escape</code>	Boolean, either TRUE or FALSE. If escape is TRUE, it means you're providing the DNA (ISIN-Market identifier) directly. Giving TRUE to escape is helpful to avoid time-consuming operations; otherwise, FALSE means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.
<code>up.col</code>	is the up color
<code>down.col</code>	is down color

Value

An interactive chart

Author(s)

Koffi Frederic SESSIE

See Also

[EN_HistData\(\)](#) and [EN_HistData_bis\(\)](#)

[EN_Ticker_hcData\(\)](#)

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Plot: [EN_OrderBook.Chart\(\)](#), [EN_plot\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
library(highcharter)
library(lubridate)
library(rlang)
library(httr2)
library(dplyr)
library(stringr)
library(xts)
library(flextable)
library(grDevices)

#Highchart of 4DDD (area chart for Last price and column chart for volume)
# Default up.col = "darkgreen", down.col = "red"
EN_Overview_plot(c("4DDD"), to = Sys.Date())

# You can change the up and down colors as follow
EN_Overview_plot("AAX", up.col = "blue", down.col = "pink")

# Plot the closing price of a group of 3 tickers
EN_Overview_plot(c("AAX", "QS0011016480", "AEX2S", "ADIDAS", "ADOBE", "ALFEN BEHEER", "1GOOGL"))

# AEX All-Tradable Alternative Weight NR, AEX Equal Weight NR,
# AEX Short GR and AEX X2 Short GR plot overview
EN_Overview_plot(c("NL0010614533", "QS0011211206", "QS0011095914", "QS0011146899"))

# Bond
EN_Overview_plot(c("XS2364001078-XMOT"), stock_type = 'B')
```

EN_Performers.Settings

Retrieve settings for stock performers.

Description

This function retrieves settings for stock performers, including the acceptable values for 'belongs_to' and 'eligibility' attributes.

Usage

```
EN_Performers.Settings(stock_choice)
```

Arguments

`stock_choice` A character string specifying the stock market. Allowed values: 'All', 'Amsterdam' (or 'A'), 'Brussels' (or 'B'), 'Dublin' (or 'D'), 'Lisbon' (or 'L'), 'Milan' (or 'M'), 'Paris' (or 'P'), 'Oslo' (or 'O').

Value

A list containing two data frames: 'belongs_to' and 'eligibility'. Each data frame has two columns: 'Information' (the text of the option) and 'Code' (the value of the attribute).

See Also

[EN_Stock.Performers](#) for retrieving performance data for stocks.

Examples

```
library(httr)
library(jsonlite)
library(stringr)
library(magrittr)

# Amsterdam stock setting:
amsterdam_settings <- EN_Performers.Settings("a")
print(amsterdam_settings)

# Brussels stock setting:
b_settings <- EN_Performers.Settings("b")
print(b_settings)

# To get all acceptable 'belongs_to' attribute code of Brussels stock
EN_Performers.Settings("b")$belongs_to$Code

# To get all acceptable 'eligibility' Code of Brussels stock
EN_Performers.Settings("b")$eligibility$Code
```

```
# To get all acceptable 'belongs_to' attribute code of Paris stock
EN_Performers.Settings("p")$belongs_to$Code

# To get all acceptable 'eligibility' Code of Paris stock
EN_Performers.Settings("p")$eligibility$Code
```

EN_plot*Euronext PLOT***Description**

This function will get Ticker(s) data and then plot it.

Usage

```
EN_plot(
  ticker,
  from = Sys.Date() - 365,
  to = Sys.Date() - 1,
  stock_type = "Eq_Ind",
  escape = FALSE,
  up.col = "darkgreen",
  down.col = "red"
)
```

Arguments

<code>ticker</code>	is the Ticker(s) name(s)
<code>from</code>	A quoted start date, ie. "2020-01-01" or "2020/01/01". The date must be in ymd format "YYYY-MM-DD" or "YYYY/MM/DD".
<code>to</code>	A quoted end date, ie. "2022-01-31" or "2022/01/31". The date must be in ymd format "YYYY-MM-DD" or "YYYY/MM/DD"
<code>stock_type</code>	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for ETFs.
<code>escape</code>	Boolean, either TRUE or FALSE. If escape is TRUE, it means you're providing the DNA (ISIN-Market identifier) directly. Giving TRUE to escape is helpful to avoid time-consuming operations; otherwise, FALSE means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.
<code>up.col</code>	is the up color
<code>down.col</code>	is down color

Value

An interactive chart

Author(s)

Koffi Frederic SESSIE

See Also

[EN_HistData\(\)](#) and [EN_HistData_bis\(\)](#)

[EN_Ticker_hcData\(\)](#)

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [En_Market.Sumarry\(\)](#)

Other Plot: [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#)

Examples

```
library(highcharter)
library(lubridate)
library(rlang)
library(httr2)
library(jsonlite)
library(stringr)
library(xts)
library(magrittr)
library(grDevices)

# Highchart of 4DDD
EN_plot(c("4DDD"), to = Sys.Date())

# You can change the up and down colors as follow
EN_plot("AAX", up.col = "blue", down.col = "pink")

# Plot the closing price of a group of 3 tickers
EN_plot(c("AAX", "QS0011016480", "AEX2S", "ADIDAS", "ADOBE", "ALFEN BEHEER", "1GOOGL"))

# AEX Equal Weight NR, AEX All-Tradable Alternative Weight NR,
# AEX Short GR and AEX X2 Short GR
EN_plot(c("NL0010614533", "QS0011211206", "QS0011095914", "QS0011146899"))

#Etfs vector plot
EN_plot(c("IE0007G78AC4", "MANA", "3TSM"), stock_type = 'E')
```

EN_P_Ticker_adn *Euronext Paris ticker ISIN*

Description

Euronext Paris ticker ISIN

Usage

```
EN_P_Ticker_adn(ticker)
```

Arguments

`ticker` A character string representing the company's ticker.

Details

This function retrieves the ISIN (International Securities Identification Number) of a company listed on the Euronext Paris exchange through the Euronext site. The function takes a single parameter `ticker`. The function automatically formats the ticker to uppercase using `toupper()`. It checks the existence of the ticker and returns its corresponding ISIN.

Value

A character

See Also

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
EN_P_Ticker_adn("abca")
result <- EN_P_Ticker_adn("AAA")
print(EN_P_Ticker_adn("afsf")) # Ticker is not existing
```

EN_Stock.Performers	<i>Retrieve performance data for stocks from various markets on the Euronext exchange.</i>
---------------------	--

Description

This function retrieves performance data for stocks from different markets on the Euronext exchange.

Usage

```
EN_Stock.Performers(
  direction = "MostActive",
  since,
  stock_choice = "All",
  capitalization = "All",
  belongs_to = "All",
  eligibility = "All",
  icb_sector = ""
)
```

Arguments

direction	(character) Direction of the stock performance data. Can be one of 'MostActive', 'Risers' (or 'R' or 'Up'), 'Fallers' (or 'F' or 'Down').
since	(character) Duration since when the performance data is requested. Allowed values: "1D" (1 day), "1M" (1 month), "1Y" (1 year), "1Jan" (since January 1st).
stock_choice	(character) Choice of the stock market. Allowed values: 'All', 'Amsterdam' (or 'A'), 'Brussels' (or 'B'), 'Dublin' (or 'D'), 'Lisbon' (or 'L'), 'Milan' (or 'M'), 'Paris' (or 'P'), 'Oslo' (or 'O').
capitalization	(character) Capitalization filter for stocks. Allowed values: 'All', 'Large Caps' (or 'LC'), 'Mid Caps' (or 'MC'), 'Small Caps' (or 'SC').
belongs_to	(character) Ownership filter for stocks. Depends on the chosen stock_choice. Consult the function EN_Performers.Settings documentation for valid values.
eligibility	(character) Eligibility criteria for stocks. Depends on the chosen stock_choice. Consult the function EN_Performers.Settings documentation for valid values. Default value: 'all'.
icb_sector	(character) ICB sector filter for stocks.

Value

A dataframe containing performance data for the specified stocks. Columns include: 'Name', 'Symbol', 'Price', 'Change %', 'Volume', 'Turnover', 'Market Cap (M)'. If no data is available, it returns NULL.


```
# Retrieve performance data for all markets with specific filters
# May be the content will not be available when you will run the following code
all_perf_data <- EN_Stock.Performers(direction = 'MostActive',
                                         since = "1D",
                                         stock_choice = "all",
                                         capitalization = 3,
                                         belongs_to = "Euro100",
                                         eligibility = "All",
                                         icb_sector = "")
```

EN_Stocks_List*Euronext Stocks List***Description**

This function retrieves a list of companies listed on the Euronext stock exchanges, filtered by the initial letter of their names. It provides information such as the company name, ticker symbol, ISIN code, market, last closing price, percentage change, and a link to the company's details on the Euronext website.

Usage

```
EN_Stocks_List(stock_choice)
```

Arguments

stock_choice	A character string specifying the stock exchange. Options include "A" or "Amsterdam," "B" or "Brussels," "D" or "Dublin", "L" or "Lisbon," "M" or "Milan," "P" or "Paris," and "O" or "Oslo."
--------------	---

Value

A data frame containing information about companies listed on the specified stock exchange. If the stock exchange choice is invalid, the function returns an error message.

See Also

[EN_Ticker_Performance](#)

Other Infos Retrieval: [EN_Bonds_List_bis\(\)](#), [EN_Bonds_List\(\)](#), [EN_Etfs_List_bis\(\)](#), [EN_Etfs_List\(\)](#), [EN_Funds_List\(\)](#), [EN_GetISIN_B\(\)](#), [EN_GetISIN_Etf\(\)](#), [EN_GetISIN_F\(\)](#), [EN_Get_News\(\)](#), [EN_Indices_List\(\)](#), [EN_Market.Sumarry\(\)](#)

Examples

```
# Example usage:
a_result_df <- EN_Stocks_List("A") # For Amsterdam Stock
head(a_result_df[, c(1:5)])

b_result_df <- EN_Stocks_List("B") # For Brussels Stock
p_result_df <- EN_Stocks_List("P") # For Paris Stock
l_result_df <- EN_Stocks_List("L") # For Lisbon Stock
m_result_df <- EN_Stocks_List("M") # For Milan Stock
d_result_df <- EN_Stocks_List("D") # For Dublin Stock
o_result_df <- EN_Stocks_List("O") # For Oslo Stock
```

EN_Ticker_hcData *Get Highchart Data : Price and Volume*

Description

This function retrieves historical price and volume data for a given stock ticker on the Euronext exchange. The data is returned as a tibble with columns for Date, Price, Volume, and Ticker. You can specify the date range for which you want to retrieve the data using the 'from' and 'to' parameters.

Usage

```
EN_Ticker_hcData(
  ticker,
  from = NULL,
  to = Sys.Date(),
  stock_type = "Eq_Ind",
  escape = FALSE
)
```

Arguments

ticker	A character string or vector representing the company's ticker, name, or ISIN. If providing a vector, at least one ticker must be specified.
from	A Date object specifying the start date for the data. Default is NULL, which retrieves data from the earliest available date. Users can adjust the value of from to specify a different start date. Only dates in the format "%Y-%m-%d" are allowed.
to	A Date object specifying the end date for the data. Default is the current date. Users can adjust the value of to to specify a different end date. Only dates in the format "%Y-%m-%d" are allowed.

<code>stock_type</code>	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.
<code>escape</code>	Boolean, either TRUE or FALSE. If escape is True, it means you're providing the DNA (ISIN-Market identifier) directly. Giving T to escape is helpful to avoid time-consuming operations; otherwise, F means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.

Value

If a single ticker is provided, a tibble containing historical price and volume data for the specified stock ticker within the specified date range. If multiple tickers are provided, a list containing data frames for each ticker is returned. If the specified ticker(s) is not found, the function returns an error message.

See Also

[EN_GetISIN](#) to retrieve the ISIN for a given ticker, [EN_HistData](#) to retrieve daily data for a given ticker.

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rlang)

# Get company ABC ARBITRAGE share hc data
dt_ABCA = EN_Ticker_hcData("ABca")
head(dt_ABCA)

dt_EOS = EN_Ticker_hcData("EOS", from = "2000-10-30", to = "2024-01-27")
head(dt_EOS)

# Get hc data of Fund KEMPEN GBL HDiv N
dt_kem = EN_Ticker_hcData("US88554D2053-ETLX", escape = TRUE)
head(dt_kem)

#To get hc data of Bond issued by A2A S.p.A.
hc_RMBS <- EN_Ticker_hcData("XS1195347478-ETLX", escape = TRUE)
head(hc_RMBS)

# Get hc data for ETF AAPL from December 15, 2023 to now
hc_aapl <- EN_Ticker_hcData("AAPL", stock_type = "E", from = "2023-12-15", to = Sys.Date())
```

```

tail(hc_aapl)

# Get indices such us AEX All-Tradable Alternative Weight NR, AEX Equal Weight NR,
# AEX Short GR and AEX X2 Short GR hc data (Date, Price, volume)
hc_list = EN_Ticker_hcData(c("NL0010614533", "QS0011211206", "QS0011095914", "QS0011146899"))
head(hc_list)

# Example to retrieve Etfs hc data
dt_etf = EN_Ticker_hcData(c("IE0007G78AC4", "MANA", "3TSM"), stock_type = 'E')
head(dt_etf)
tail(dt_etf)

# Example to retrieve Bonds hc data
dt_bonds = EN_Ticker_hcData(c("XS2364001078-XMOT", "AAB1.50%30SEP30"), stock_type = 'B')
head(dt_bonds)
tail(dt_bonds)

```

Description

This function retrieves detailed information for a given stock ticker on the Euronext exchange. It includes information such as currency, last traded price, valuation close, volume, turnover, transactions, VWAP (Volume Weighted Average Price), open, high, low, threshold, previous close, 52-week range, and market capitalization. The data is returned as a data frame.

Usage

```
EN_Ticker_infos(ticker, escape = FALSE, stock_type = "Eq_Ind")
```

Arguments

ticker	A character string representing the company's ticker, name, or ISIN.
escape	Boolean, either TRUE or FALSE. If escape is True, it means you're providing the DNA (ISIN-Market identifier) directly. Giving T to escape is helpful to avoid time-consuming operations; otherwise, F means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.
stock_type	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.

Value

A data frame containing detailed information for the specified stock ticker. If the specified ticker is not found, the function returns an error message.

See Also

[EN_GetISIN](#) to retrieve the ISIN for a given ticker.

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_Performance\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
library(httr)
library(jsonlite)
library(rvest)
library(stringr)
library(rlang)
library(magrittr)

#Get ABCA informations
dt_ABCA = EN_Ticker_infos("ABca")
print(dt_ABCA)

dt_EOS = EN_Ticker_infos("EOS")
print(dt_EOS)

dt_fund = EN_Ticker_infos("CH1135202138-XPAR", stock_type = "F", escape = TRUE)
print(dt_fund)

dt_new = EN_Ticker_infos("AAPL", stock_type = "E") # To Get ETF AAPL informations
print(dt_new)

# To show only 5 pages of bonds list and select directly the bond DNA
dt_ = EN_Bonds_List()
# To Get informations about BOND issued in 2019 by POPOLARE BARI RMBS
dt_new1 = EN_Ticker_infos("IT0005386716-XMOT", stock_type = "B", escape = TRUE)
print(dt_new1)

dt_newfund = EN_Ticker_infos("KGHDF", stock_type = "F")
print(dt_newfund)
```

Description

This function retrieves the historical performance data of a company listed on the Euronext exchange based on its ticker symbol. It returns a table with details such as the highest and lowest stock prices, date of the highest and lowest prices, and other relevant information.

Usage

```
EN_Ticker_Performance(ticker, escape = FALSE, stock_type = "Eq_Ind")
```

Arguments

ticker	A character string representing the company's ticker symbol.
escape	Boolean, either TRUE or FALSE. If escape is True, it means you're providing the DNA (ISIN-Market identifier) directly. Giving T to escape is helpful to avoid time-consuming operations; otherwise, F means you need to provide the Ticker symbol, name, or ISIN and the type of market to which it belongs.
stock_type	The type of the ticker: 'Eq_Ind' for Stocks and Indexes, 'Fund' or "F" for Fund tickers, 'Bond' or "B" for Bond tickers, and 'Etfs' or "E" for EFTs.

Value

A data frame containing historical performance data of the specified company. If the ticker is not found, it returns the message "Ticker not found."

See Also

[EN_GetISIN](#) to retrieve the ISIN for a given ticker.

Other Data Retrieval: [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#), [En_Market.Sumarry\(\)](#)

Other Euronext: [EN_Get_News\(\)](#), [EN_Get_OB\(\)](#), [EN_HistData_bis\(\)](#), [EN_HistData\(\)](#), [EN_OrderBook.Chart\(\)](#), [EN_Overview_plot\(\)](#), [EN_P_Ticker_adn\(\)](#), [EN_Stock.Performers\(\)](#), [EN_Ticker_hcData\(\)](#), [EN_Ticker_infos\(\)](#), [EN_intraday_Data\(\)](#), [EN_plot\(\)](#)

Examples

```
library(httr)
library(httr2)
library(rvest)
library(jsonlite)
library(stringr)
library(magrittr)

# Get Performance of Bond issued by A2A S.p.A.
dt1 = EN_Ticker_Performance("XS1195347478-ETLX", escape = TRUE)
#print(dt1[, c(1:6,8,12)])
```

```
# Get Performance of Ticker ABCA
dt = EN_Ticker_Performance("ABCA")
print(dt)
# Get Performance of ETF AAPL
EN_Ticker_Performance("AAPL", stock_type = "E")

# Get Performance of ACOMEA EMERGING Q2 Fund
dt2 = EN_Ticker_Performance("IT0005091126", stock_type ='F')
print(dt2[, c(1:6,8,12)])

# Get Performance of AEX All-Share Index
dt3 = EN_Ticker_Performance("AEX All-Share Index GR")
print(dt3[, c(1:6,8,12)])
```

Index

- * **Companies List by stock**
 - EN_Stocks_List, 34
- * **Data Retrieval**
 - EN_Get_OB, 15
 - EN_HistData, 16
 - EN_HistData_bis, 18
 - EN_intraday_Data, 21
 - EN_Market.Sumarry, 22
 - EN_OrderBook.Chart, 24
 - EN_Overview_plot, 26
 - EN_plot, 29
 - EN_Stock.Performers, 32
 - EN_Ticker_hcData, 35
 - EN_Ticker_infos, 37
 - EN_Ticker_Performance, 38
- * **Euronext**
 - EN_Get_News, 13
 - EN_Get_OB, 15
 - EN_HistData, 16
 - EN_HistData_bis, 18
 - EN_intraday_Data, 21
 - EN_OrderBook.Chart, 24
 - EN_Overview_plot, 26
 - EN_P_Ticker_adn, 31
 - EN_plot, 29
 - EN_Stock.Performers, 32
 - EN_Ticker_hcData, 35
 - EN_Ticker_infos, 37
 - EN_Ticker_Performance, 38
- * **ISIN Retrieval**
 - EN_GetISIN_B, 8
 - EN_GetISIN_Etf, 9
 - EN_GetISIN_F, 10
- * **Infos Retrieval**
 - EN_Bonds_List, 2
 - EN_Bonds_List_bis, 3
 - EN_Etfs_List, 4
 - EN_Etfs_List_bis, 5
 - EN_Funds_List, 6
- EN_Get_News, 13
- EN_GetISIN_B, 8
- EN_GetISIN_Etf, 9
- EN_GetISIN_F, 10
- EN_Indices_List, 20
- En_Market.Sumarry, 22
- EN_Stocks_List, 34
- * **IsIN Retrieval**
 - EN_P_Ticker_adn, 31
- * **Plot**
 - EN_OrderBook.Chart, 24
 - EN_Overview_plot, 26
 - EN_plot, 29
- EN_Bonds_List, 2, 3–7, 9–11, 14, 20, 23, 34
- EN_Bonds_List_bis, 3, 3, 5–7, 9–11, 14, 20, 23, 34
- EN_Etfs_List, 3, 4, 4, 6, 7, 9–11, 14, 20, 23, 34
- EN_Etfs_List_bis, 3–5, 5, 7, 9–11, 14, 20, 23, 34
- EN_Funds_List, 3–6, 6, 9–11, 14, 20, 23, 34
- EN_Get_News, 3–7, 9–11, 13, 16, 17, 19, 20, 22, 23, 25, 27, 30, 31, 33, 34, 36, 38, 39
- EN_Get_OB, 14, 15, 17, 19, 22, 23, 25, 27, 30, 31, 33, 36, 38, 39
- EN_GetISIN, 7, 9–11, 14, 17, 19, 22, 36, 38, 39
- EN_GetISIN_B, 3–7, 8, 10, 11, 14, 20, 23, 34
- EN_GetISIN_Etf, 3–7, 9, 9, 11, 14, 20, 23, 34
- EN_GetISIN_F, 3–7, 9, 10, 10, 14, 20, 23, 34
- EN_GetProfile, 11, 16
- EN_HistData, 14, 16, 16, 19, 22, 23, 25, 27, 30, 31, 33, 36, 38, 39
- EN_HistData_bis, 14, 16, 17, 18, 22, 23, 25, 27, 30, 31, 33, 36, 38, 39
- EN_Indices_List, 3–7, 9–11, 14, 20, 23, 34
- EN_intraday_Data, 14, 16, 17, 19, 21, 23, 25, 27, 30, 31, 33, 36, 38, 39

En_Market.Sumarry, [3–7](#), [9–11](#), [14](#), [16](#), [17](#),
[19](#), [20](#), [22](#), [25](#), [27](#), [30](#), [33](#), [34](#), [36](#),
[38](#), [39](#)
EN_OrderBook.Chart, [14](#), [16](#), [17](#), [19](#), [22](#), [23](#),
[24](#), [27](#), [30](#), [31](#), [33](#), [36](#), [38](#), [39](#)
EN_Overview_plot, [14](#), [16](#), [17](#), [19](#), [22](#), [23](#), [25](#),
[26](#), [30](#), [31](#), [33](#), [36](#), [38](#), [39](#)
EN_P_Ticker_adn, [14](#), [16](#), [17](#), [19](#), [22](#), [25](#), [27](#),
[30](#), [31](#), [33](#), [36](#), [38](#), [39](#)
EN_Performers.Settings, [28](#), [32](#), [33](#)
EN_plot, [14](#), [16](#), [17](#), [19](#), [22](#), [23](#), [25](#), [27](#), [29](#), [31](#),
[33](#), [36](#), [38](#), [39](#)
EN_Stock.Performers, [14](#), [16](#), [17](#), [19](#), [22](#), [23](#),
[25](#), [27](#), [28](#), [30](#), [31](#), [32](#), [36](#), [38](#), [39](#)
EN_Stocks_List, [3–7](#), [9–11](#), [14](#), [20](#), [23](#), [34](#)
EN_Ticker_hcData, [14](#), [16](#), [17](#), [19](#), [22](#), [23](#), [25](#),
[27](#), [30](#), [31](#), [33](#), [35](#), [38](#), [39](#)
EN_Ticker_infos, [14](#), [16](#), [17](#), [19](#), [22](#), [23](#), [25](#),
[27](#), [30](#), [31](#), [33](#), [36](#), [37](#), [39](#)
EN_Ticker_Performance, [14](#), [16](#), [17](#), [19](#), [22](#),
[23](#), [25](#), [27](#), [30](#), [31](#), [33](#), [34](#), [36](#), [38](#), [38](#)