## Package ‘moexer’

March 12, 2024

**Type** Package  

**Title** Interact with Moscow Exchange Informational and Statistical Server (ISS)  

**Version** 0.3.0  

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**Description** This is a thin wrapper around the 'MOEX' 'ISS' REST interface, see &lt;https://iss.moex.com&gt;. It allows to quickly fetch price candles for a particular security, obtain its profile information and so on.  

**License** GPL-3  

**Language** en-GB  

**Encoding** UTF-8  

**RoxygenNote** 7.2.3  

**Depends** R (&gt;= 4.2.0)  

**Imports** glue, purrr, htr, jsonlite, tibble, readr, rlang, stringr, assertthat, cli, dplyr, lubridate, ggplot2  

**Suggests** testthat, knitr, rmarkdown  

**URL** [https://github.com/x1o/moexer](https://github.com/x1o/moexer)  

**BugReports** [https://github.com/x1o/moexer/issues](https://github.com/x1o/moexer/issues)  

**NeedsCompilation** no  

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**Repository** CRAN  

**Date/Publication** 2024-03-12 12:30:03 UTC  

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fetching_fully

Description

A decorator for query_iss to increase the start parameter in a loop until no more data is received.

Usage

fetching_fully(query_iss_fn)

Arguments

query_iss_fn  A function object corresponding to query_iss.

Value

Decorated query_iss_fn.

Examples

## Not run:
fetching_fully(query_iss)(
  'engines(stock/markets/shares/boards/TQBR/securities/SBER/candles',
  params = list(
    from = URLencode('2020-01-10 10:00:00'),
    till = URLencode('2020-01-10 23:59:59'),
    interval = 1,
    start = 10
  )
)

## End(Not run)
**following_cursor**  
*A Decorator for Following Response Cursor*

### Description

Iterative queries will be issued to fetch all section pages as indicated by `<section>.cursor`; the cursor section itself will be removed from the response.

### Usage

```r
following_cursor(query_iss_fn)
```

### Arguments

- `query_iss_fn`  
  A function object corresponding to `query_iss`.

### Value

Decorated `query_iss_fn`.

### Examples

```r
## Not run:
following_cursor(query_iss)(
  'history/engines/stock/markets/shares/securities/MOEX',
  params = list(
    from = '2021-09-01',
    till = '2021-12-31',
    start = 10
  )
)

## End(Not run)
```

---

**get_candles**  
*Get Candles for a Set of Securities*

### Description

REST path: `/engines/[engine]/markets/[market]/boards/[board]/securities/[security]/candles` (see [http://iss.moex.com/iss/reference/46](http://iss.moex.com/iss/reference/46)).

### Usage

```r
get_candles(secid, from, till = NULL, interval = "monthly", ...)
```
get_candles

Arguments

secid A vector of security ID’s.
from A date or a datetime object, or something that can be coerced to it with readr::parse_date or readr::parse_datetime.
till A date or a datetime object, or something that can be coerced to it with readr::parse_date or readr::parse_datetime, or NULL. If NULL, interpreted by ISS as "today".
interval A character value specifying the candle duration (see moexer.candle.intervals option.)
... Further arguments to query_iss.

Details

To get the engine-market-board path a separate get_security_info query is made and the board with is_primary = 1 is selected.

All candles for the specified period will be fetched, see fetching_fully.

Value

A tibble as with candles in OHLCV format, prepended with a column containing the corresponding security ID.

Examples

```r
# Not run:
# Get daily candles for 'SBER', 'FXGD' from 2020-01-01 until today. Note that 
# an unknown symbol 'XXXX' is skipped with a warning.
get_candles(
  secid = c('XXXX', 'SBER', 'FXGD'),
  from = '2020-01-01',
  debug_output = TRUE
)

# Get SBER minute candles for one trading day (all 526 of them)
get_candles(
  secid = 'SBER',
  from = '2020-01-10',
  till = '2020-01-10',
  interval = 'per_minute'
)

# Get SBER minute candles for the specified time period (1 hour)
get_candles(
  secid = 'SBER',
  from = '2020-01-10 11:00:00',
  till = '2020-01-10 12:00:00',
  interval = 'per_minute'
)
```

## End(Not run)
get_candleBorders

Get Possible Candle from-till Values for a Security

Description

REST path: /engines/[engine]/markets/[market]/boards/[board]/securities/[security]/candleBorders
(see http://iss.moex.com/iss/reference/48).

Usage

get_candleBorders(secid, ...)

Arguments

secid A vector of security ID’s.
...
Further arguments to query_iss.

Details

To get the engine-market-board path a separate get_security_info query is made and the board with is_primary = 1 is selected.

Value

A tibble with possible from-till values for each interval; additionally the intervals-durations mapping tibble is joined.

Examples

## Not run:
get_candleBorders(secid = c('SBER', 'FXGD'))

## End(Not run)

get_candleDurations

Get Candle Durations-Intervals Mapping

Description

REST path: /index?iss.only=durations (see http://iss.moex.com/iss/reference/28)

Usage

get_candleDurations(...)


get_security_info

Get a Security’s Info

Arguments

... Further arguments to query_iss.

Value

A tibble with the durations-intervals mapping.

Examples

## Not run:
get_candle_durations()

## End(Not run)

get_security_info

Get a Security’s Info

Description

REST path: securities/[security] (see http://iss.moex.com/iss/reference/13)

Usage

get_security_info(secid, ...)

Arguments

secid A security ID.

... Further arguments to query_iss

Value

A list with two tibbles:

- description: Full instrument profile incl. its type, listing level, etc.
- boards: The security's boards with boardid, history_from, ... columns.

Examples

## Not run:
get_security_info(secid = 'SBER')

## End(Not run)
### plot.MoexCandles

#### Description

Plot Candles

#### Usage

```r
## S3 method for class 'MoexCandles'
plot(x, ...)
```

#### Arguments

- `x` A candles tibble as returned by `get_candles()`
- `...` For compatibility with the generic; ignored

#### Value

A ggplot2 object.

#### Examples

```r
## Not run:
get_candles(secid = 'SBER', from = '2020-01-01') |> plot()
## End(Not run)
```

---

### query_iss

#### Description


#### Usage

```r
query_iss(rest_path, params = list(), debug_output = getOption("moexer.debug"))
```

#### Arguments

- `rest_path` A REST path appended to `iss_base_url`.
- `params` A HTTP GET query parameters string, passed as a list (not URL-escaped!)
- `debug_output` Print REST URLs as they are queried.
search_security

Value

A list of tibbles, corresponding to the blocks in the response.

Examples

```r
## Not run:
query_iss(
  rest_path = 'securities/SBER',
  params = list(iss.only = 'description'),
  debug_output = TRUE
)

## End(Not run)
```

---

search_security  Search for a Single Security

Description

REST path: `/securities` (See [http://iss.moex.com/iss/reference/5](http://iss.moex.com/iss/reference/5))

Usage

```r
search_security(query, ...)
```

Arguments

- `query`  (A part of the) ID, name, ISIN, issuer ID, reg. number of a security.
- `...` Further arguments to `query_iss`

Value

A tibble with a list of matched securities.

Examples

```r
## Not run:
search_security(query = 'SBER')

## End(Not run)
```
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