Package ‘NasdaqDataLink’

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Title   API Wrapper for Nasdaq Data Link
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Description
Functions for interacting directly with the Nasdaq Data Link API to offer data in a number of formats usable in R, downloading a zip with all data from a Nasdaq Data Link database, and the ability to search. This R package uses the Nasdaq Data Link API. For more information go to <https://docs.data.nasdaq.com/>. For more help on the package itself go to <https://data.nasdaq.com/tools/r>.

Imports  htr (>= 0.6.1), zoo, jsonlite (>= 0.9.14), methods
Suggests  testthat (>= 0.10.0), roxygen2, timeSeries
Depends  R (>= 3.5.0), xts
License MIT + file LICENSE
URL  https://github.com/nasdaq/data-link-r

BugReports https://github.com/nasdaq/data-link-r/issues
RoxygenNote 7.1.1
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metaData

Retrieve metadata from a Nasdaq Data Link series or search results

Description

Retrieve metadata from a Nasdaq Data Link series or search results

Usage

metaData(x)

Arguments

x

A Nasdaq Data Link time series object or search results with attached meta data.

Value

Returns a list of meta data about the series or search results.

See Also

NasdaqDataLink.api_key, NasdaqDataLink.search

Examples

```r
## Not run:
metaData(ts)
## End(Not run)
```
**NasdaqDataLink**

*Retrieves Data from the Nasdaq Data Link Dataset endpoint and formats*

**Description**

Retrieves Data from the Nasdaq Data Link Dataset endpoint and formats

**Usage**

```r
NasdaqDataLink(
  code,
  type = c("raw", "ts", "zoo", "xts", "timeSeries"),
  transform = c("", "diff", "rdiff", "normalize", "cumul", "rdiff_from"),
  collapse = c("", "daily", "weekly", "monthly", "quarterly", "annual"),
  order = c("desc", "asc"),
  meta = FALSE,
  force_irregular = FALSE,
  ...
)
```

**Arguments**

- `code`: Dataset code on Nasdaq Data Link specified as a string or an array of strings.
- `type`: Type of data returned specified as string. Can be 'raw', 'ts', 'zoo', 'xts' or 'timeSeries'.
- `transform`: Apply Nasdaq Data Link API data transformations.
- `collapse`: Collapse frequency of Data.
- `order`: Select if data is given to R in ascending or descending formats. Helpful for the rows parameter.
- `meta`: Adds meta data as an attribute to the returned Data.
- `force_irregular`: When set to TRUE, forces the index of the Data to be of date format yyyy-mm-dd.
- `...`: Additional named values that are interpreted as Nasdaq Data Link API parameters. Please see [https://docs.data.nasdaq.com/docs/in-depth-usage#get-time-series-metadata](https://docs.data.nasdaq.com/docs/in-depth-usage#get-time-series-metadata) for a full list of parameters.

**Details**

Set your api_key with `NasdaqDataLink.api_key` function. For instructions on finding your api key go to [https://data.nasdaq.com/account/profile](https://data.nasdaq.com/account/profile).

**Value**

Depending on the type the class is either data.frame, time series, xts, zoo or timeSeries.
NasdaqDataLink.api_key

References

This R package uses the Nasdaq Data Link API. For more information go to https://docs.data.nasdaq.com. For more help on the package itself go to https://data.nasdaq.com/tools/r.

See Also

NasdaqDataLink.api_key

Examples

```r
## Not run:
data_link_data = NasdaqDataLink("NSE/OIL", collapse="monthly", start_date="2013-01-01", type="ts")
plot(data_link_data[,1])
## End(Not run)
```

---

NasdaqDataLink.api_key

*Query or set Nasdaq Data Link API key*

Description

Query or set Nasdaq Data Link API key

Usage

NasdaqDataLink.api_key(api_key)

Arguments

api_key

Optionally passed parameter to set Nasdaq Data Link api_key.

Value

Returns invisibly the currently set api_key.

Examples

```r
## Not run:
NasdaqDataLink.api_key('foobar')
## End(Not run)
```
NasdaqDataLink.auth

Query or set Nasdaq Data Link API token

Description

Deprecated. Alias of NasdaqDataLink.api_key

Usage

NasdaqDataLink.auth(auth_token)

Arguments

auth_token
Optionally passed parameter to set Nasdaq Data Link auth_token.

Value

Returns invisibly the currently set auth_token.

See Also

NasdaqDataLink.api_key

Examples

## Not run:
NasdaqDataLink.auth('foobar')

## End(Not run)

NasdaqDataLink.base_url

Query or set Base URL for White-labeled sites

Description

Query or set Base URL for White-labeled sites

Usage

NasdaqDataLink.base_url(base_url)

Arguments

base_url
Optionally passed parameter to set Nasdaq Data Link base_url.
NasdaqDataLink.database.bulk_download_to_file

Description

Downloads a zip with all data from a Nasdaq Data Link database

Usage

NasdaqDataLink.database.bulk_download_to_file(database_code, filename, ...)

Arguments

database_code  Database code on Nasdaq Data Link specified as a string.
filename         Filename (including path) of file to download.
...              Additional named values that are interpreted as NasdaqDataLink API parameters. Please see https://docs.data.nasdaq.com/docs/parameters-2 for a full list of parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account PROFILE

Value

The filename of the downloaded file.

See Also

NasdaqDataLink.api_key

Examples

## Not run:
NasdaqDataLink.database.bulk_download_to_file("NSE", ".NSE.zip")

## End(Not run)

Value

Returns invisibly the currently set base_url.

Examples

## Not run:
NasdaqDataLink.base_url('http://localhost')

## End(Not run)
NasdaqDataLink.database.bulk_download_url

Returns the bulk download url

Description

Returns the bulk download url

Usage

NasdaqDataLink.database.bulk_download_url(database_code, ...)

Arguments

database_code    Database code on Nasdaq Data Link specified as a string.
...

Additional named values that are interpreted as Nasdaq Data Link API parameters. Please see https://docs.data.nasdaq.com/docs/parameters-2 for a full list of parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns the download url.

See Also

NasdaqDataLink.api_key

Examples

## Not run:
url = NasdaqDataLink.database.download_url("NSE", download_type="partial")

## End(Not run)
NasdaqDataLink.dataset.get

Retrieves Data from the Nasdaq Data Link Dataset endpoint

Description

Retrieves Data from the Nasdaq Data Link Dataset endpoint

Usage

NasdaqDataLink.dataset.get(code, params)

Arguments

code
Dataset code on Nasdaq Data Link specified as a string.

params
A list of parameters to be passed to the Nasdaq Data Link API. Please see https://docs.data.nasdaq.com/docs/in-depth-usage#get-time-series-metadata for a full list of parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns a data.frame of the requested data

See Also

NasdaqDataLink.api_key, NasdaqDataLink

Examples

## Not run:
data_link_data = NasdaqDataLink.dataset.get("NSE/OIL", list(rows=5))
plot(data_link_data[,1])

## End(Not run)
NasdaqDataLink.datatable

Retrieves Data from the Nasdaq Data Link Datatable endpoint

Description

Retrieves Data from the Nasdaq Data Link Datatable endpoint

Usage

NasdaqDataLink.datatable(datatable_code, paginate = FALSE, ...)

Arguments

datatable_code  Datatable code on Nasdaq Data Link specified as a string.
paginate        When set to TRUE, fetches up to 1,000,000 rows of data
...             Additional named values that are interpreted as Nasdaq Data Link API parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns a data.frame.

See Also

NasdaqDataLink.api_key

Examples

## Not run:
NasdaqDataLink.datatable('ZACKS/FC', paginate=TRUE)

## End(Not run)
Description

Downloads a zip with all data requested from a Nasdaq Data Link database.

Usage

NasdaqDataLink.datatable.bulk_download_to_file(datatable_code, filename, ...)

Arguments

datatable_code  Datatable code on Nasdaq Data Link specified as a string.
filename        Filename (including path) of file to download.
...             Additional named values that are interpreted as Nasdaq Data Link API parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns a data.frame.

See Also

NasdaqDataLink.api_key

Examples

## Not run:
NasdaqDataLink.datatable.bulk_download_to_file('ZACKS/EE')

## End(Not run)
NasdaqDataLink.datatable.bulk_download_url

Generates and returns a bulk download url

Description

Generates and returns a bulk download url

Usage

NasdaqDataLink.datatable.bulk_download_url(datatable_code, ...)

Arguments

datatable_code  Datatable code on Nasdaq Data Link specified as a string.
...

Additional named values that are interpreted as Nasdaq Data Link API parameters. Please see https://docs.data.nasdaq.com/docs/parameters-1 for a full list of parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns the download url.

See Also

NasdaqDataLink.api_key

Examples

## Not run:
url = NasdaqDataLink.datatable.bulk_download_url("ZACKS/EE", ticker="AAPL")

## End(Not run)
NasdaqDataLink.pit.asofdate

Retrieves Point In Time Data from the Nasdaq Data Link PIT endpoint. As of date is used to see the table as it was at a specific point in time in the past.

Description

Retrieves Point In Time Data from the Nasdaq Data Link PIT endpoint. As of date is used to see the table as it was at a specific point in time in the past.

Usage

NasdaqDataLink.pit.asofdate(datatable_code, start_date, paginate = FALSE, ...)

Arguments

datatable_code  Datatable code on Nasdaq Data Link specified as a string.
start_date  Lower date as a string.
paginate  When set to TRUE, fetches up to 1,000,000 rows of data
...  Additional named values that are interpreted as Nasdaq Data Link API parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns a data.frame.

See Also

NasdaqDataLink.api_key

Examples

# Not run:
NasdaqDataLink.pit.asofdate('RSM/MSB', '2020-06-11', paginate=TRUE)

## End(Not run)
NasdaqDataLink.pit.between

Retrieves Point In Time Data from the Nasdaq Data Link PIT endpoint. Between start and end will show all rows that were visible at any point between two specified points in time. It works inclusively, a row visible exactly at start or exactly at end will be shown too.

Description

Retrieves Point In Time Data from the Nasdaq Data Link PIT endpoint. Between start and end will show all rows that were visible at any point between two specified points in time. It works inclusively, a row visible exactly at start or exactly at end will be shown too.

Usage

NasdaqDataLink.pit.between(
  datatable_code,
  start_date,
  end_date,
  paginate = FALSE,
  ...)

Arguments

datatable_code Datatable code on Nasdaq Data Link specified as a string.
start_date Lower date as a string.
end_date Upper date as a string.
paginate When set to TRUE, fetches up to 1,000,000 rows of data
... Additional named values that are interpreted as Nasdaq Data Link API parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns a data.frame.

See Also

NasdaqDataLink.api_key
NasdaqDataLink.pit.fromto

Retrieves Point In Time Data from the Nasdaq Data Link PIT endpoint. From start to end will also show all rows that were visible at any point between two specified points in time, including start, but excluding end.

Description

Retrieves Point In Time Data from the Nasdaq Data Link PIT endpoint. From start to end will also show all rows that were visible at any point between two specified points in time, including start, but excluding end.

Usage

NasdaqDataLink.pit.fromto(
  datatable_code,
  start_date,
  end_date,
  paginate = FALSE,
  ...
)

Arguments

datatable_code  Datatable code on Nasdaq Data Link specified as a string.
start_date      Lower date as a string.
end_date        Upper date as a string.
paginate        When set to TRUE, fetches up to 1,000,000 rows of data
...              Additional named values that are interpreted as Nasdaq Data Link API parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

Value

Returns a data.frame.
NasdaqDataLink.search

See Also

NasdaqDataLink.api_key

Examples

```r
## Not run:
NasdaqDataLink.pit.fromto('RSM/MSB', '2020-06-11', '2020-06-12', paginate=TRUE)
## End(Not run)
```

---

NasdaqDataLink.search  Search the Nasdaq Data Link database

Description

Search the Nasdaq Data Link database

Usage

NasdaqDataLink.search(query, silent = FALSE, per_page = 10, ...)

Arguments

- **query**: Search terms
- **silent**: Prints the results when FALSE.
- **per_page**: Number of results returned per page.
- **...**: Additional named values that are interpreted as Nasdaq Data Link API parameters.

Details

Set your api_key with NasdaqDataLink.api_key function. For instructions on finding your api key go to https://data.nasdaq.com/account/profile

For instructions on finding your authentication token go to https://data.nasdaq.com/account/profile

Value

Search results returned as a data.frame.

See Also

NasdaqDataLink.api_key

Examples

```r
## Not run:
search.results <- NasdaqDataLink.search("oil")
## End(Not run)
```
nasdaq_data_link.api  

Executes Nasdaq Data Link API calls

Description

Executes Nasdaq Data Link API calls

Usage

```
nasdaq_data_link.api(
  path,
  http = c("GET", "PUT", "POST", "DELETE"),
  postdata = NULL,
  ...
)
```

Arguments

- **path**: Path to api resource.
- **http**: Type of http request sent.
- **postdata**: A character or raw vector that is sent in a body.
- **...**: Named values that are interpreted as Nasdaq Data Link API parameters. Please see [https://docs.data.nasdaq.com/](https://docs.data.nasdaq.com/).

Details

Set your `api_key` with `NasdaqDataLink.api_key` function. For instructions on finding your api key go to [https://data.nasdaq.com/account/profile](https://data.nasdaq.com/account/profile)

Value

Nasdaq Data Link API response.

See Also

`NasdaqDataLink.api_key`

Examples

```
## Not run:
data_link_data = nasdaq_data_link.api(path="datasets/NSE/OIL", http="GET")
plot(data_link_data[,1])

## End(Not run)
```
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