

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

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URL <https://github.com/nasdaq/data-link-r>

BugReports <https://github.com/nasdaq/data-link-r/issues>

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metaData	<i>Retrieve metadata from a Nasdaq Data Link series or search results</i>
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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

```
## Not run:
metaData(ts)

## End(Not run)
```

NasdaqDataLink	<i>Retrieves Data from the Nasdaq Data Link Dataset endpoint and formats</i>
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Description

Retrieves Data from the Nasdaq Data Link Dataset endpoint and formats

Usage

```
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 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

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

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

```
## 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

```
## 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.

Value

Returns invisibly the currently set base_url.

Examples

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

## End(Not run)
```

```
NasdaqDataLink.database.bulk_download_to_file
```

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

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)
```

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

<code>datatable_code</code>	Datatable code on Nasdaq Data Link specified as a string.
<code>paginate</code>	When set to TRUE, fetches up to 1,000,000 rows of data
<code>...</code>	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)
```

NasdaqDataLink.datatable.bulk_download_to_file

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

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

<code>datatable_code</code>	Datatable code on Nasdaq Data Link specified as a string.
<code>filename</code>	Filename (including path) of file to download.
<code>...</code>	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

<code>datatable_code</code>	Datatable code on Nasdaq Data Link specified as a string.
<code>start_date</code>	Lower date as a string.
<code>paginate</code>	When set to TRUE, fetches up to 1,000,000 rows of data
<code>...</code>	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

<code>datatable_code</code>	Datatable code on Nasdaq Data Link specified as a string.
<code>start_date</code>	Lower date as a string.
<code>end_date</code>	Upper date as a string.
<code>paginate</code>	When set to TRUE, fetches up to 1,000,000 rows of data
<code>...</code>	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.between('RSM/MSB', '2020-06-11', '2020-06-12', paginate=TRUE)

## End(Not run)
```

```
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

<code>datatable_code</code>	Datatable code on Nasdaq Data Link specified as a string.
<code>start_date</code>	Lower date as a string.
<code>end_date</code>	Upper date as a string.
<code>paginate</code>	When set to TRUE, fetches up to 1,000,000 rows of data
<code>...</code>	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.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

```
## 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/ .

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

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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