# Baltic Exchange API

## Baltic Exchange Ltd

Version: 1.2

Baltic Exchange

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# Overview

The Baltic API allows you to create feeds of sources that you can access programmatically to retrieve data.

You can define feeds within the portal. These feeds are unique to you and allow you define what data you want and in what format you want them.

# Authentication

## Portal Login

You can access the portal here: https://api.balticexchange.com.

You will be presented with a login screen from which you can use your existing Baltic login credentials.

If you are not entitled yet to use the API endpoints, you can still login and use the portal to see how it works.

Once you are logged in, in the top right you will see your profile.

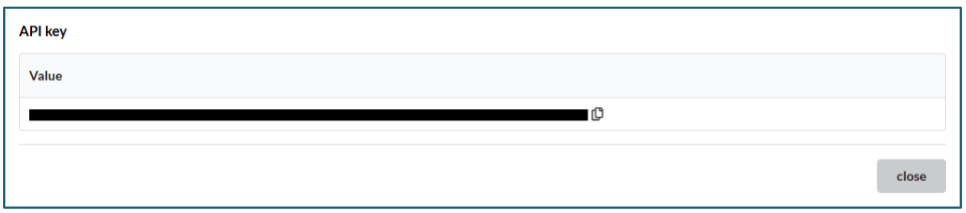

You can logout by clicking “Logout”. This will take you back to the login screen.

## API Authentication

If you are entitled to use the API endpoints, you are assigned an API Key.

You can access your key once you have logged in. In the top right of the screen, you see your profile.


Clicking on the key icon will open a dialog box, displaying the key. You will only see this icon if you are entitled to use the API endpoints.



Clicking on the copy icon will copy the key value to your clipboard.

You will use the key when making requests against the API. You will assign its value to the header “x-apikey” when making requests. More on this in the section Data retrieval.

## API Key Management

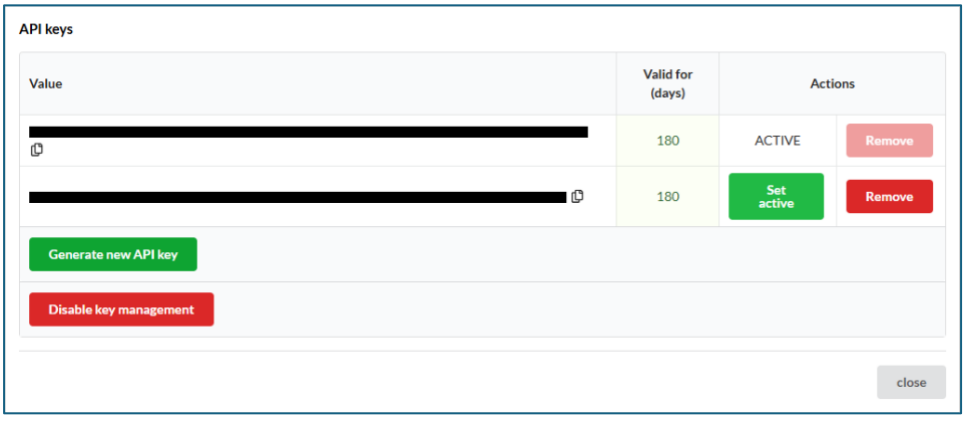
If you are entitled to use the API endpoints, you will be assigned an API Key.

It is important to keep this key safe as you will use it to access the data endpoints. If you want to manage your own API keys, then you can request this by emailing support@balticexchange.com.

If you need to change your API key (if you think your API key is compromised, for example), you can enable “API Key Management”, clicking “Enable key management”.


If API Key management is enabled for your account, you will see this instead.


You can add a new key by clicking “Generate new API key”.



Only one key can be active at any one time. Click “Set active” to choose which key you want to be able to use.

You can also remove any inactive key by clicking “Remove”.

Note, you can disable key management, but if you do this, you will need to contact support@balticexchange.com to reactivate it.

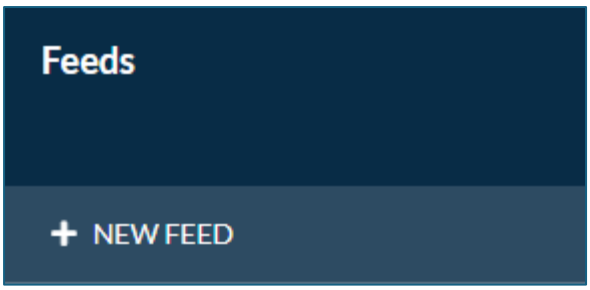
**IMPORTANT:** If you have “API Key management” enabled, your API Keys will have expiries applied to them. Once they expire, you will not be able to use them to retrieve data and you will need to generate a new key and set it active.

# Feed Management

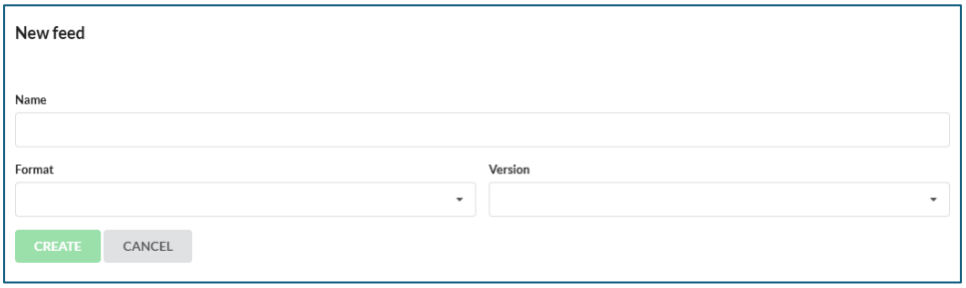
Feeds are collections of data sources for which you can get data for. You can create as many feeds as you like and define what sources you want in them. Once you have done this, you can then call endpoints to determine when the latest data has changed for any sources within that feed and to retrieve data within it.

## Creating a Feed

You can create a new Feed by clicking “New Feed” from the left-hand navigation.




This will open the “New Feed page”.




Choose a name for your feed. It is useful here to name your feed something that tells you what is in it.

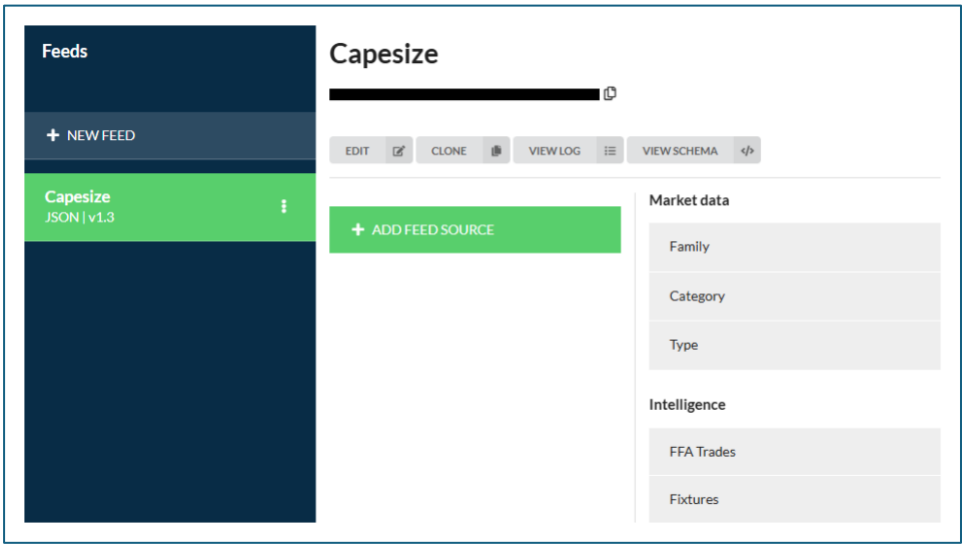
The “Format” determines the format of the data that will be returned by the API data endpoint. Depending on what your account is enabled for, you can select between the following options.

- JSON
- XML – legacy
- CSV

If you are a new API customer, you will only get access to JSON. If you would like to have access to XML and/or CSV, please contact support@balticexchange.com.

The version indicates the schema version of the data returned. If you are unsure on which to choose, select the highest version number as it typically contains the most metadata and data. More on this in the Versioning section.

When you have chosen the name, format and version, click "Create". You will be then taken to the "Feed" page.

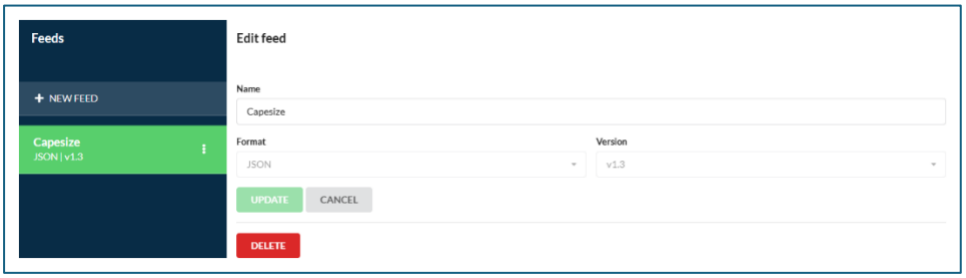



You have a couple of options for your feed, namely:

- Edit
- Clone
- View log
- View schema

## Editing Feeds

Clicking "Edit" on the "Feed page" will display the "Feed edit screen".




You can edit the name of the Feed. Once you are done, click "Update" to save your changes.

Currently, you are not able to change the format or the version.

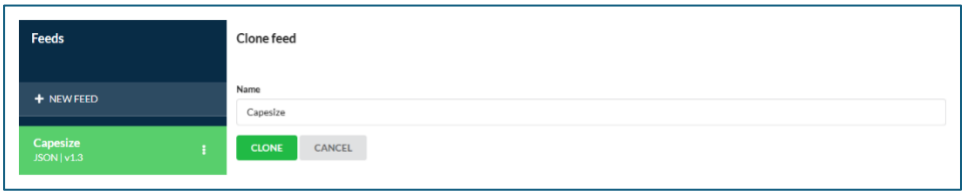
Clicking "Delete" will display a confirmation. Note, this decision is not reversible.

## Cloning Feeds

Clicking “Clone” on the “Feed page” will display the “Feed clone” screen.

Cloning a feed creates a copy on one of your existing feeds and its sources. The cloned copy also has the same format and version as the original.

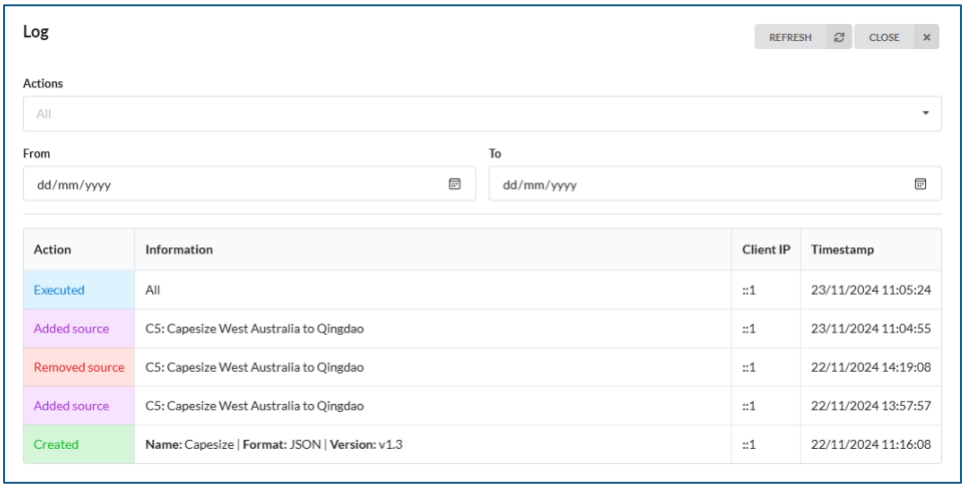
You may want to do this to try out any amends to an existing feed.




Choose a name for the cloned feed and click “Clone”. This will take you to the “Feed page” of the cloned feed.

## Viewing Feed Logs

Clicking “View log” on the “Feed screen” will display the “Feed Log screen”. Here is an example.




This lists when, what and from what IP address from, changes or execution to a feed have been made.

Use the filters to focus on certain types of events or date ranges.

## Viewing Feed Schemas

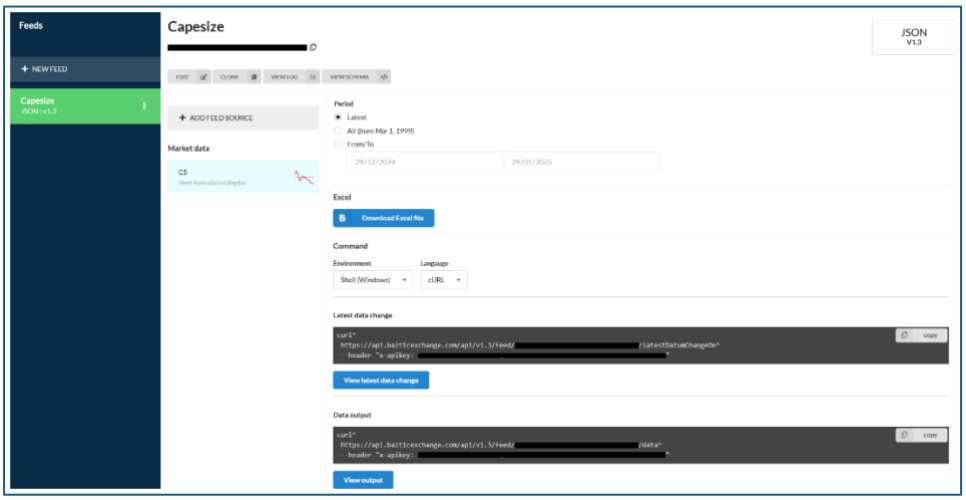
Clicking “Schema” on the “Feed page” will display the “Schema” screen. Here is an example.


It displays the schema for the feed’s format and version. You can download it by clicking on the “Download” button.

Full details of the currently supported formats and version, and their respective schemas can be found in the Appendix.

## Viewing a Feed

Clicking on feed in the left-hand navigation will display the feed page.




# Source Management

You decide on what data sources are included in your feed.

Opening the “Feed” screen gives you options to manage sources within it using the “Source Explorer”.

## Source Types

Sources are organised into two groups.

- **Market data**
  These are either indices or FFAs. They are further organised in three ways:
    - Family
    - Category
    - Type
- **Intelligence**
  There are FFA Trades or Fixtures.

## Adding Sources to a Feed

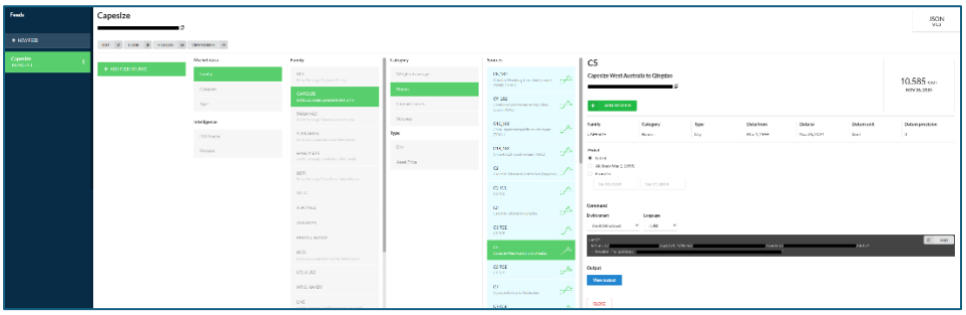
Indices and FFAs reside within families, categories, and types. Using the “Source Explorer”, you can find sources by each one of these.

For example, you can find the index C5 by either of these ways.

1. Market data: Family > Family: Capesize > Category: Routes > C5
2. Market data: Family > Family: Capesize > Type: Dry > C5
3. Market data: Category > Category: Routes > Family: Capesize > C5
4. Market data: Category > Category: Routes > Type: Dry > C5
5. Market data: Type > Type: Dry > Family: Capesize > C5
6. Market data: Type > Type: Dry > Category: Routes > C5

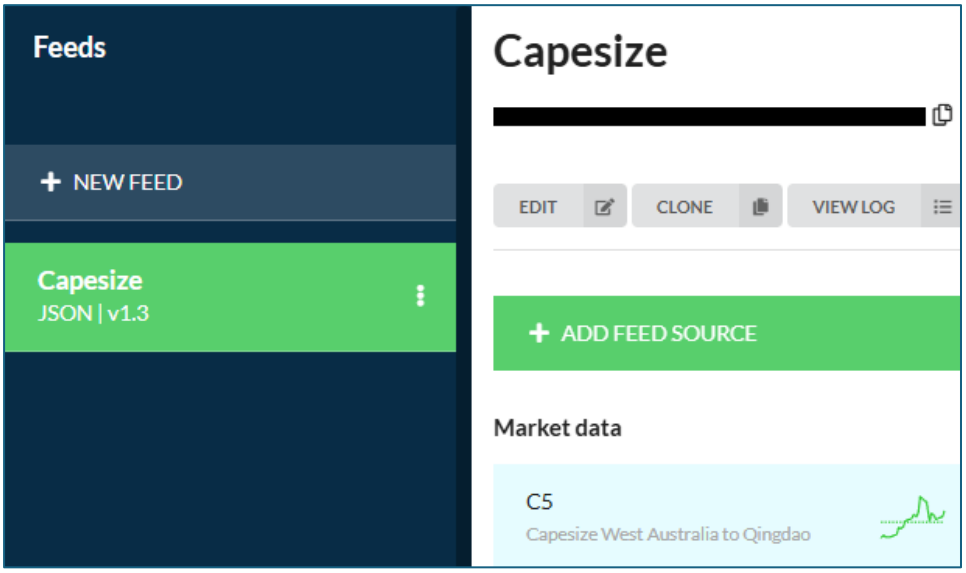
Essentially, you can find sources by how you know them.

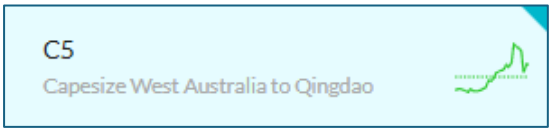
Here is an example of navigating to C5 via the first option.



When you have got to the source you want included in your feed, click “Add to feed”.

When you have done that, the source is added to the “Source list” in your feed, and a marker (a blue triangle in the top right) is added to the source, indicating it is in your feed.




## Source screen

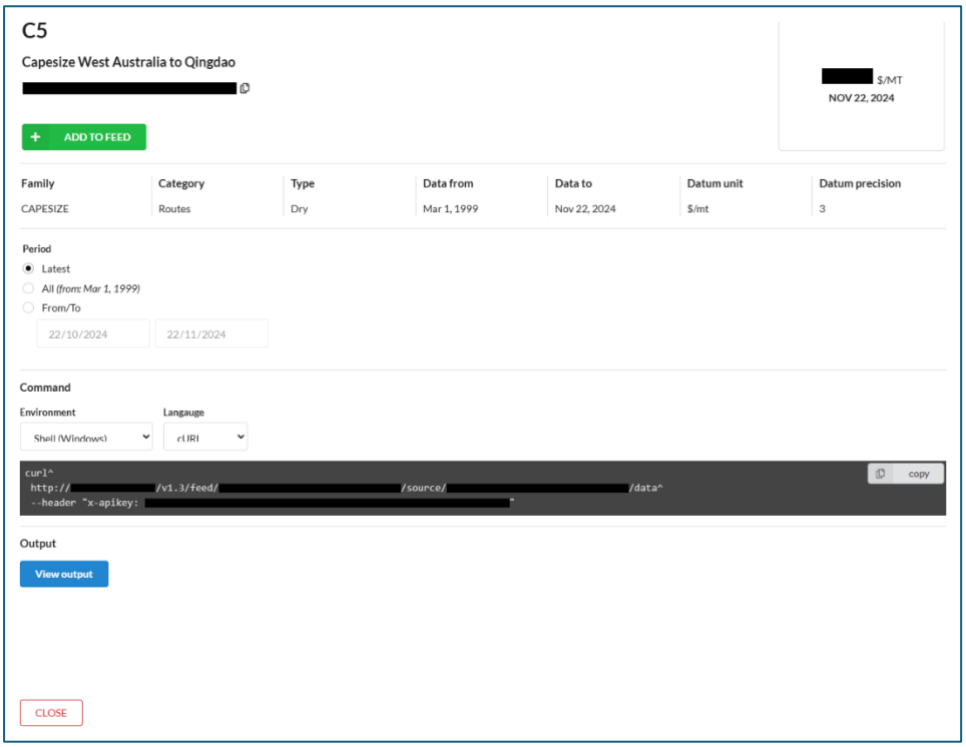
The source screen varies depending on the data type, namely:

- Index
- FFA
- FFA Trade
- Fixture

You may or may not be entitled for all types of data. If you have queries about what you do, or do not have access to, please contact support@balticexchange.com.

## Index

Here is an example of an index source.




### *Metadata*

This section displays some details of the index such as:

- Current value
- Family
- Category
- Type
- Data from
- Data to
- Datum unit
- Datum precision

### *Data filter*

In the “Period” section, you can select a date range for which you want data. “Latest” is selected by default. You can choose “All” or explicitly set “From” and “To” dates.

Note, when you select/change these values, the command window is dynamically updated.

### *Command window*

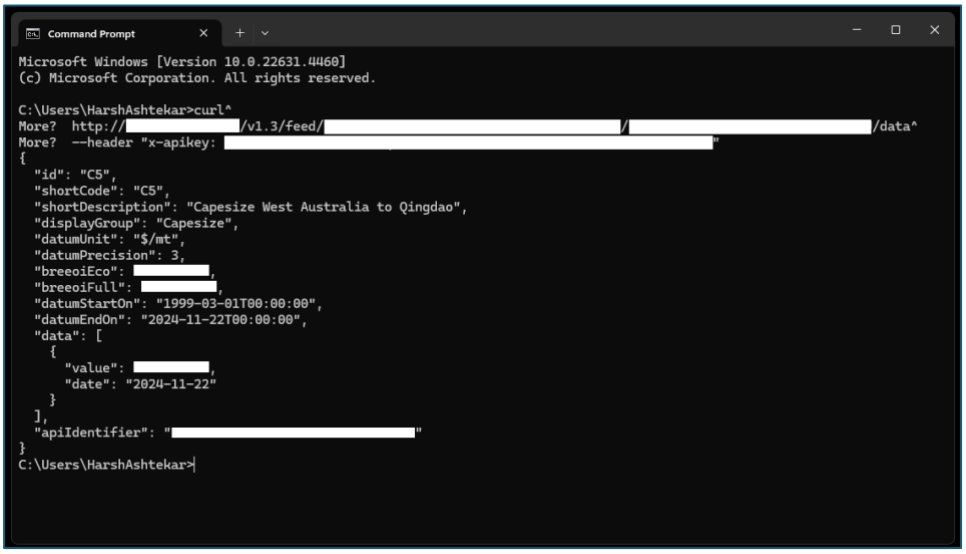
The command window displays what command can be run outside of the UI, as an example of retrieving data.

You can select the command environment and language. Changes to these will dynamically update the command.

Click “View output”, runs the command and displays its output. The output is of the format and version of the feed you are within. Once you have got an output, you can click “download” to download the result locally.

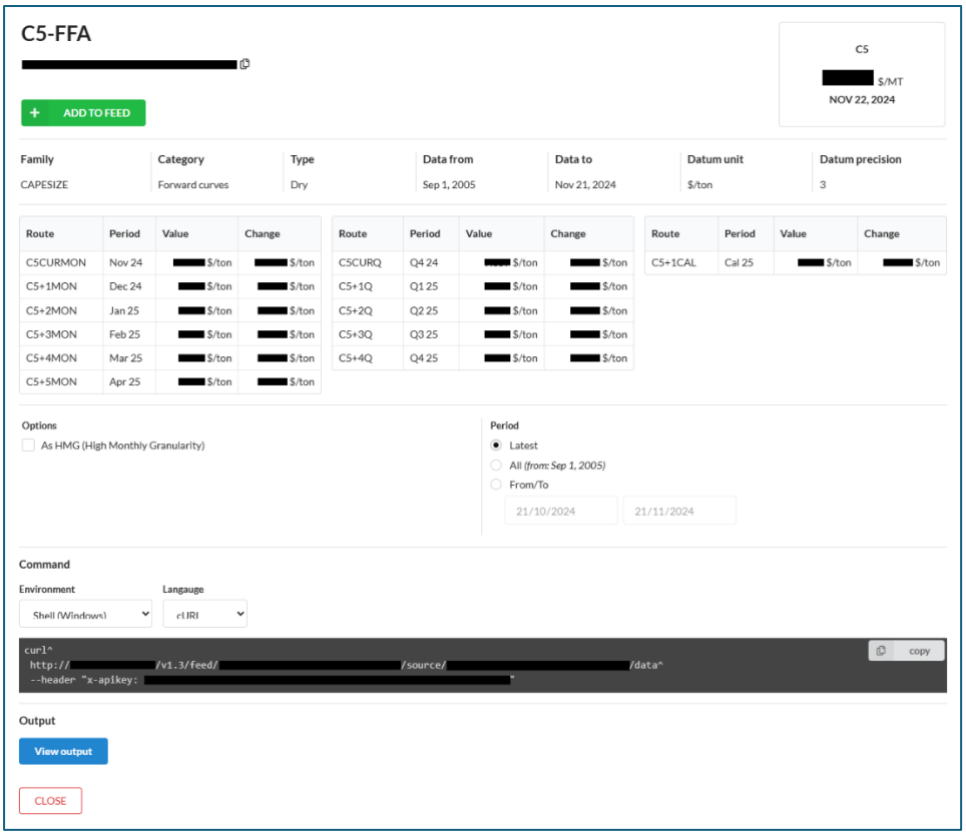

Changing the environment, language or period values will reset the output.

Clicking the “copy” button copies the command text to your clipboard. As an example, copying and then running the command in a Windows command window, yields a result like the below.




## FFA

Here is an example of an FFA source.




### *Metadata*

This section displays some information about the FFA, such as:

- Current value of associated index
- Current values
- Family
- Category
- Type
- Data from
- Data to
- Datum unit
- Datum precision

### *Options*

For FFAs, you can optionally select having the output using HMG (High Monthly Granularity).

Note, when you change this value, the command window is dynamically updated.

### *Date filter*

In the “Period” section, you can select a date range for which you want data. “Latest” is selected by default. You can choose “All” or explicitly set, “From” and “To” dates.

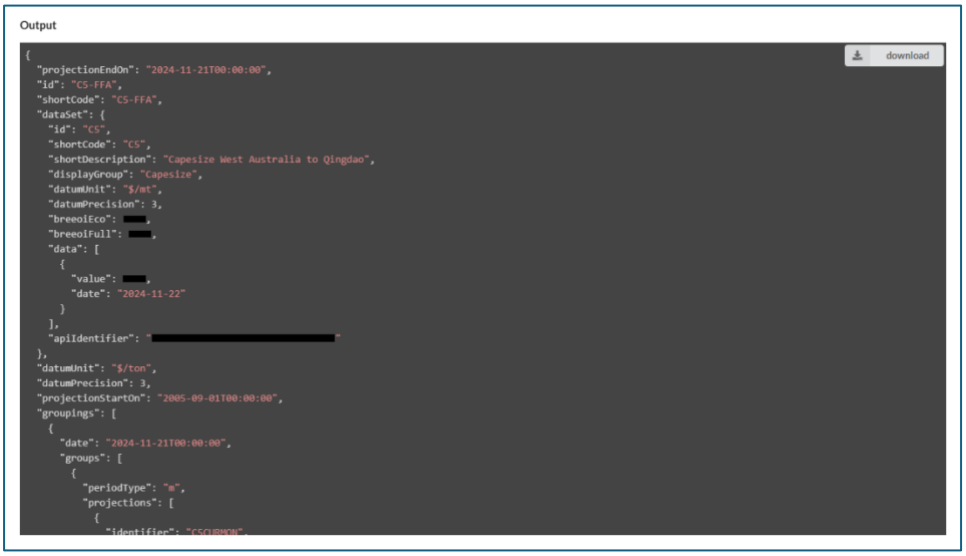
Note, when you select/change these values, the command window is dynamically updated.

### *Command window*

The command window displays what command can be run outside of the UI as an example of retrieving data.

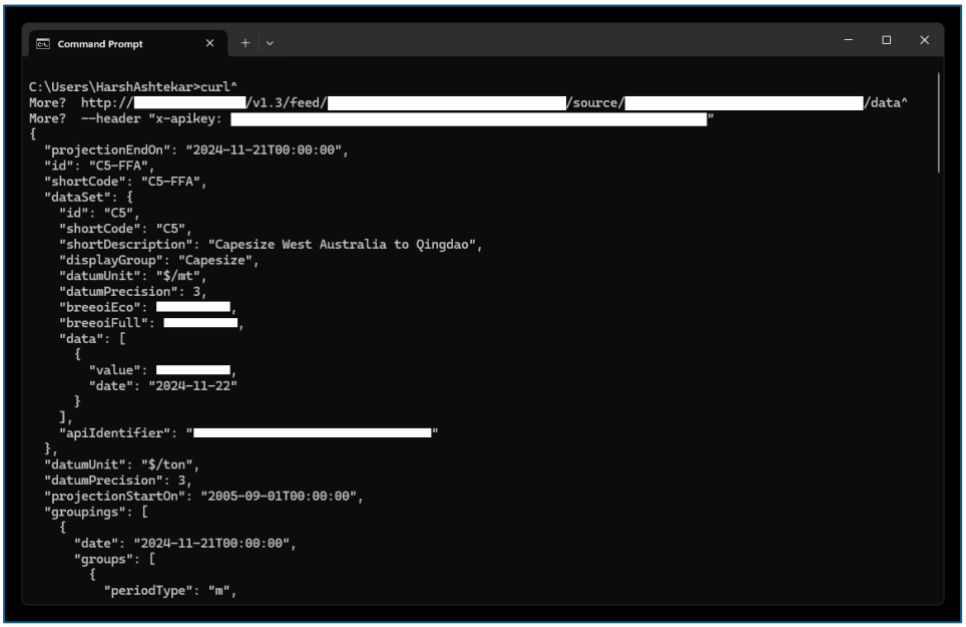
You can select the command environment and language. Changes to these will dynamically update the command.

Click “View output”, runs the command and displays its output. The output is of the format and version of the feed you are within. Once you have got an output, you can click “download” to download the result locally.




Changing the environment, language, HMG option or period values will reset the output.

Clicking the “copy” button copies the command text to your clipboard. As an example, copying and then running the command in a Windows command window, yields a result like below.



## FFA Trade

Here is an example of an FFA Trade source.

### *Metadata*

This section displays some information about the FFA Trade symbol, such as:

- Category
- Sector
- Vessel
- Available from
- Available to

### *Types filter*

For FFA Trades, you can select the type of output you want, such as:

- Trades
- Intraday
- Trades + Intraday

Note, when you change this value, the command window is dynamically updated.

### *Date filter*

In the “Period” section, you can select a date range for which you want data. “Latest” is selected by default. You can choose “All” or explicitly set, “From” and “To” dates.

Note, when you select/change these values, the command window is dynamically updated.

### *Command window*

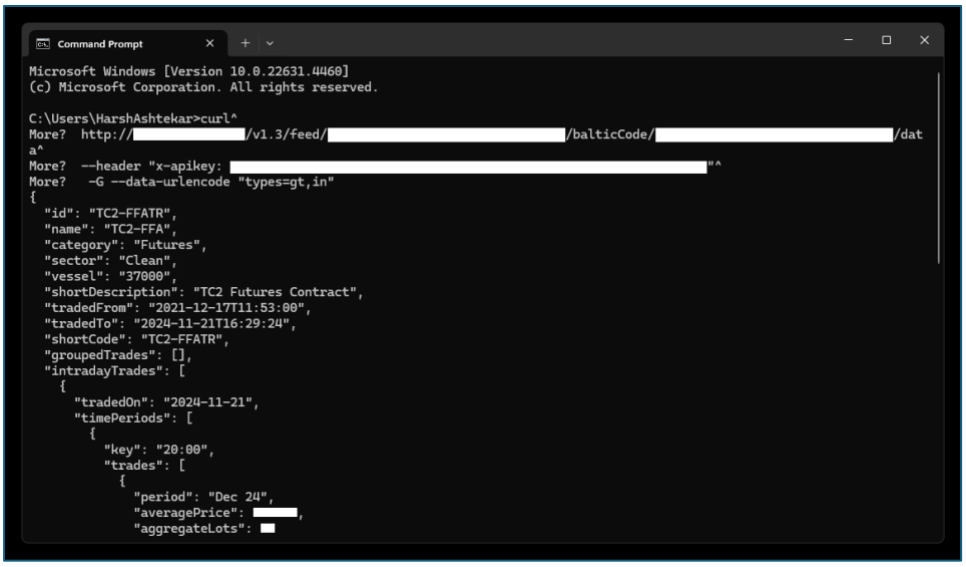
The command window displays what command can be run outside of the UI as an example of retrieving data.

You can select the command environment and language. Changes to these will dynamically update the command.

Click “View output”, runs the command and displays its output. The output is of the format and version of the feed you are within. Once you have got an output, you can click “download” to download the result locally.

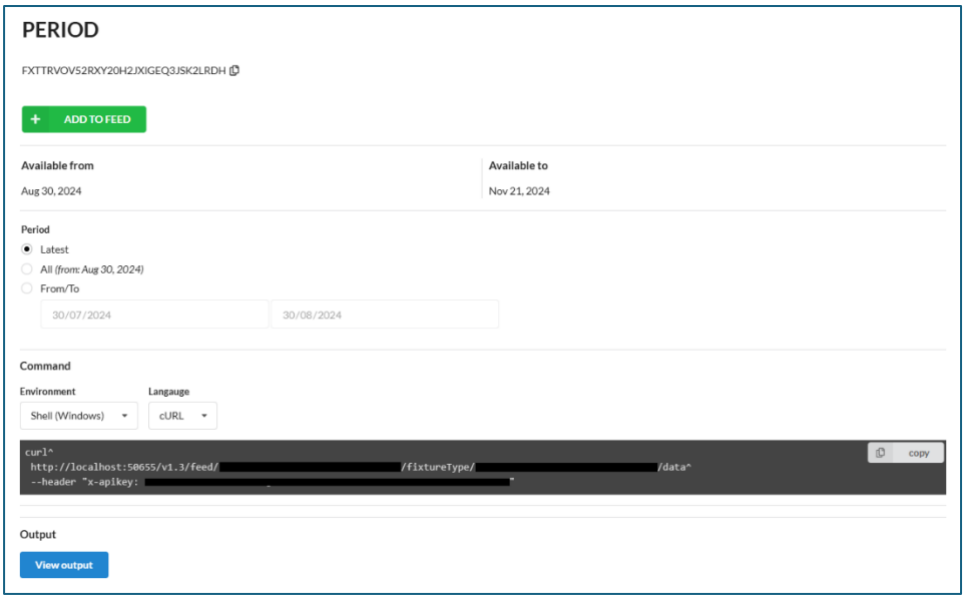

Changing the environment, language, type options or period values will reset the output.

Clicking the “copy” button copies the command text to your clipboard. As an example, copying and then running the command in a Windows command window, yields a result like below.




## Fixture Type

Here is an example of a Fixture Type source.




### *Metadata*

This section displays some information about the Fixture source, such as:

- Available from
- Available to

### *Date filter*

In the “Period” section, you can select a date range for which you want data. “Latest” is selected by default. You can choose “All” or explicitly set, “From” and “To” dates.

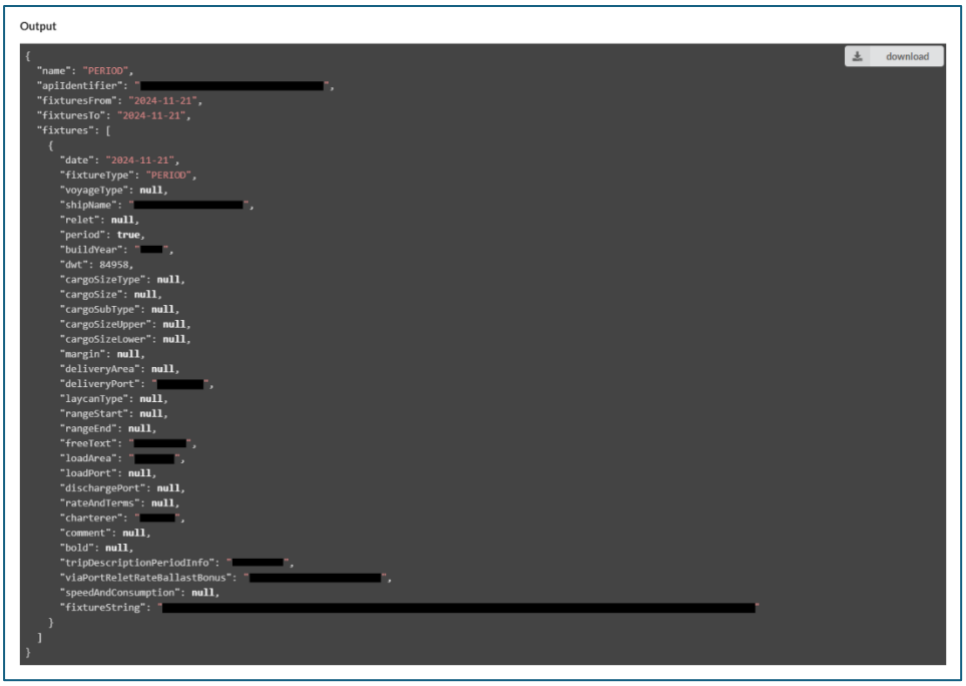
Note, when you select/change these values, the command window is dynamically updated.

### *Command window*

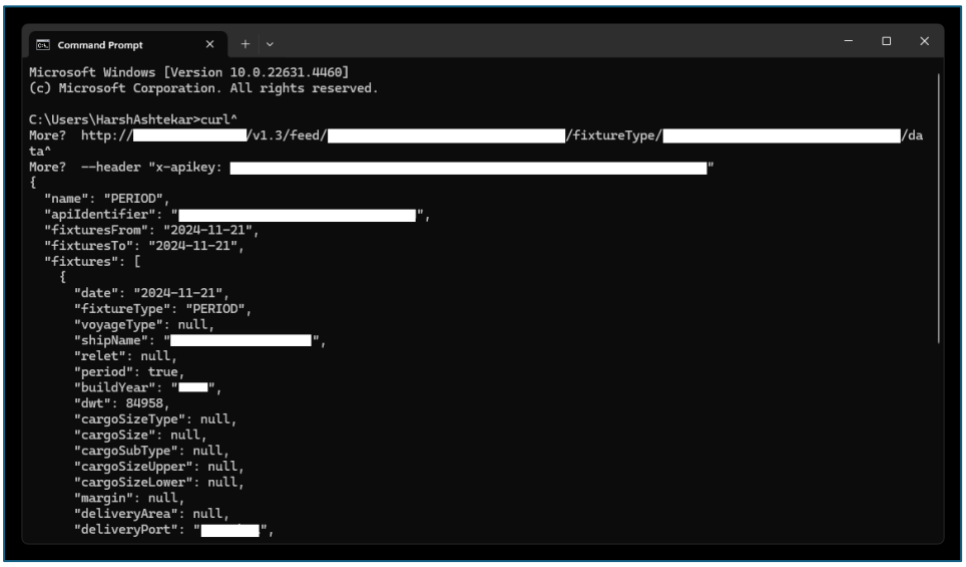
The command window displays what command can be run outside of the UI as an example of retrieving data.

You can select the command environment and language. Changes to these will dynamically update the command.

Click “View output”, runs the command and displays its output. The output is of the format and version of the feed you are within. Once you have got an output, you can click “download” to download the result locally.




Changing the environment, language or period values will reset the output.




## Removing a Source from a Feed

Clicking the “Remove from feed” button on the “Source” page, will prompt you to confirm you want to remove the source from the feed.


If you do this, the source is removed from the “Source list” of your feed and the marker is removed.

# Data Retrieval

## Detecting Data Changes

Typically, most Baltic index or FFA data sources change once a day. Because of this, it is *not* recommended that you execute data requests multiple times in short succession as the data is unlikely to change.

Because of this, we have provided an endpoint which tells you what time the last data change has been on for a feed. If this differs from a previous request, you will know the next request will contain data that will have changed.

On the “Feed screen”, you will see this:

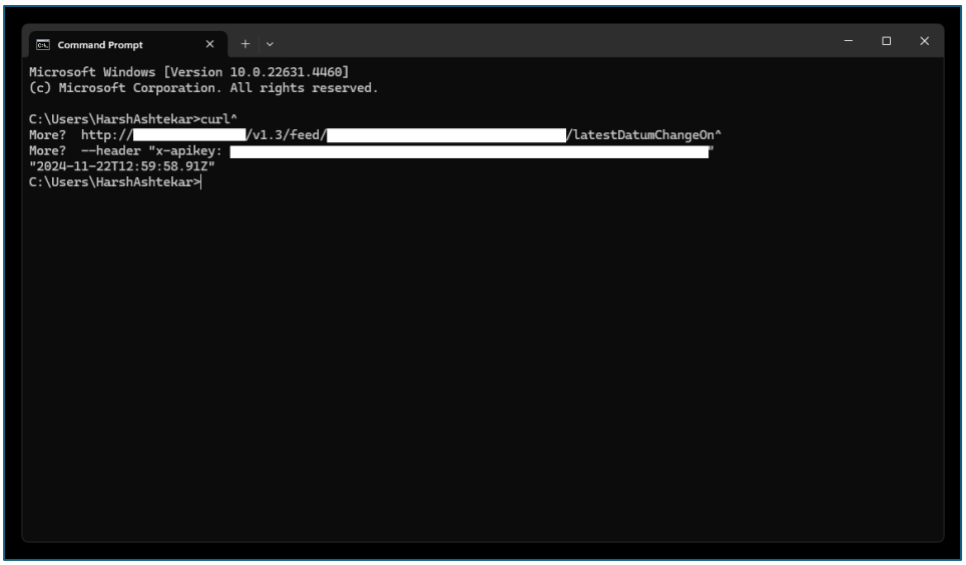

Clicking “View latest data change” will display when the data for this feed, has last changed.


You can make call to this endpoint as many times as you want. It is not rate limited.

IMPORTANT: Before making calls to the data endpoint, you should call this endpoint and compare the result against the last value you retrieved for it. If the value has not changed, the data endpoint will not yield different results.

If you do not do this and make too many data requests in short succession, you will risk hitting the API limits. See this section for details: API Limits.

You can run this command outside of the UI. As an example, copying and then running the command in a Windows command window, yields a result like below.




# Getting Data

## Via the UI

You can get data for a feed from the UI from the “Feed screen”.

### *Date filter*

In the “Period” section, you can select a date range for which you want data. “Latest” is selected by default. You can choose “All” or explicitly set “From” and “To” dates.

Note, when you select/change these values, the command window is dynamically updated.

### *Command window*

The command window displays what command can be run outside of the UI as an example of retrieving data.

You can select the command environment and language. Changes to these will dynamically update the command.

Click “View output”, runs the command and displays its output. The output is of the format and version of the feed you are within. Once you have got an output, you can click “download” to download the result locally.

Note, there are limits to making data requests via the UI. See this section for more details: API Limits.

## Via external calls

The UI presents details on how to call the data endpoints for your feeds outside of the UI. Your developers will integrate calls to the endpoints from their code, using GET endpoints. They are listed below.

| HTTP Method | Details |
|---|---|
| GET | **/{version}/feed/{feedApiIdentifier}/latestDatumChangeOn**<br><br>Gets the timestamp of the last data change within a feed. Use this before using the data endpoint. |
| GET | **/{version}/feed/{feedApiIdentifier}/data**<br><br>Gets data for your feed. |
| GET | **/{version}/feed/{feedApiIdentifier}/source/{sourceApiIdentifier}/data**<br><br>Gets data for a single index or FFA source within your feed. |
| GET | **/{version}/feed/{feedApiIdentifier}/balticCode/{balticCodeApiIdentifier}/data**<br><br>Gets data for a single contract code within your feed. |
| GET | **/{version}/feed/{feedApiIdentifier}/fixtureType/{fixtureTypeApiIdentifier}/data**<br><br>Gets data for a single fixture type within your feed. |

Typically, you would be using the “lastDatumChangeOn” and “feed data” endpoint, as opposed to the endpoints for individual sources, contact codes and fixture types.

### *Parameters*

Here is a list of the parameters and where you can find their values.

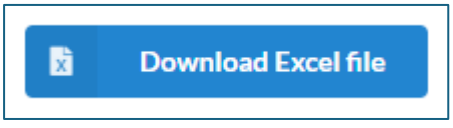
| Parameter | Details |
|---|---|
| {version} | This is the version of the schema for your feed. You can find this on the top right of the “Feed” screen.<br><br>Below, the “version” is “v1.3”. |

| | |
|---|---|
| |  |
| {feedApiIdentifier} (URL fragment) | This is the “Feed API Identifier”. You will find this under the title of your feed.<br>  <br>Feed API Identifiers have the prefix “FDS”. |
| {sourceApiIdentifier} (URL fragment) | This is a “Source API Identifier”. Sources are either index and or an FFA. You will find this on a “Source” screen.<br>  <br>Different market data source types have different identifier prefixes.<br>• **Indices:** IDS or RDS<br>• **FFA:** RPS |
| {balticCodeApiIdentifier} (URL fragment) | This is the “Baltic Code API Identifier”. You will find this on the “Source” screen.<br>  <br>FFA Trade sources API Identifier have the prefix “BCT”. |
| {fixtureTypeApiIdentifier} (URL fragment) | This is the “Fixture Type API Identifier”. You will find this on the “Source” screen.<br>  |

| | |
|---|---|
| | Fixture Type source API Identifiers have the prefix “FXT”. |
| x-apikey (HTTP header) | This parameter should be set to your API key. See API Authentication.<br><br>It needs to be added as a header when making GET requests to the endpoints. |
| from (query string) | Adding a query string parameter “from={yyyy-MM-dd}” to a data request, will ensure only data from the date specified. |
| to (query string) | Adding a query string parameter “to={yyyy-MM-dd}” to a data request, will ensure only data to the date specified (inclusive). |
| types (query string) | Adding a query string parameter “types={value}” to a FFA Trade data request, will ensure trades are returned for the types specified.<br><br>Valid values are:<br><br>• gt,in: Grouped trades + Intraday (default)<br>• gt: Grouped Trades only<br>• in: Intraday Trades only |
| asHmg (query string) | Adding a query string parameter “asHmg={value}” to a FFA data request, will ensure data is returned as HMG or not.<br><br>Valid values are:<br><br>• true<br>• false (default) |

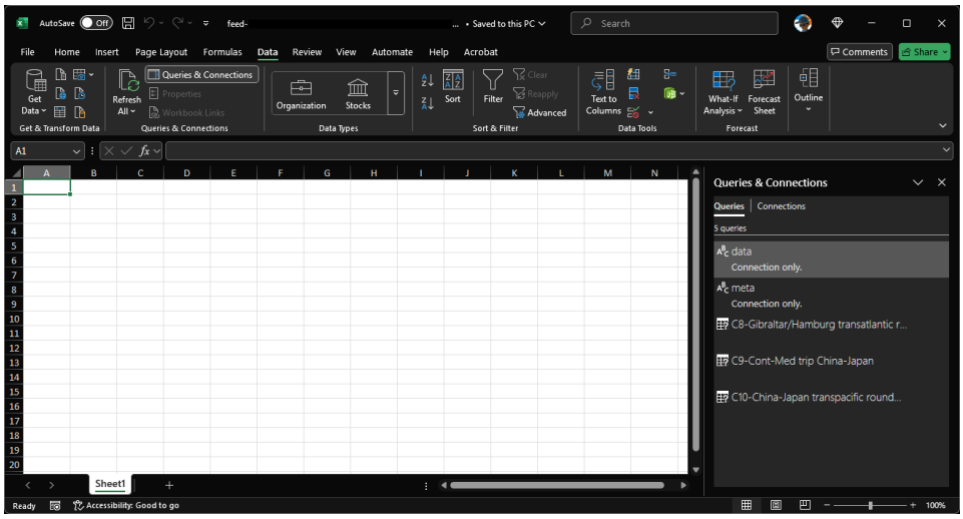
## Via Excel

On a feed page, you will see a button labelled “Download Excel file”.

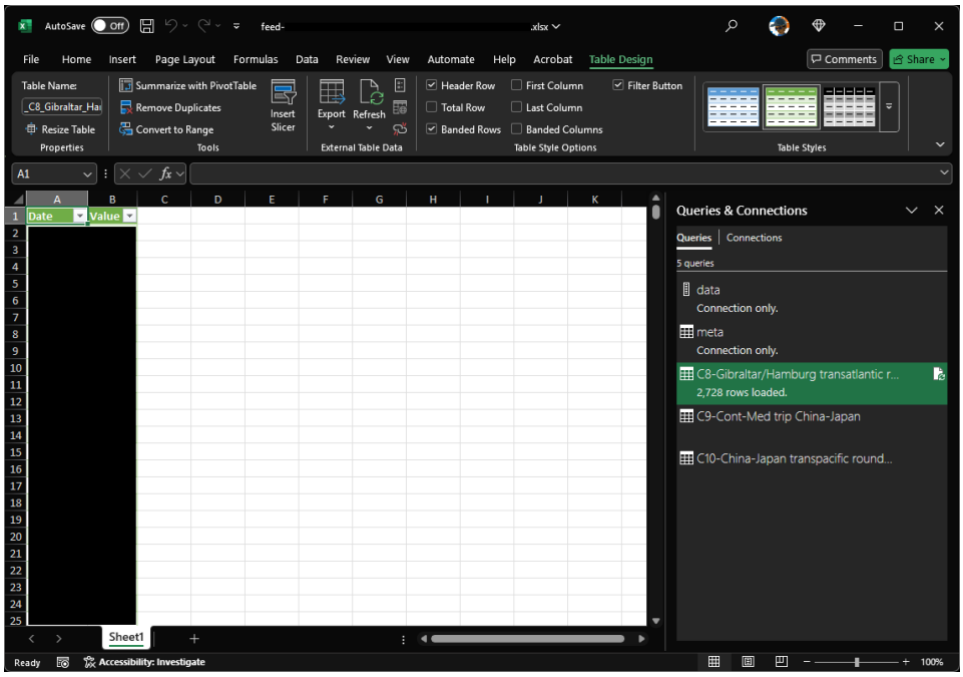



Clicking this will download an Excel file with a data source pre-built in connecting to the API with your credentials.

Opening this file will display what looks like a blank Excel file. However, clicking “Queries & Connections” on the “Data” tab will display the Power M queries within the file.




You can use these connections to load data directly from the API into Excel. This is an example of loading the data for C8 into a worksheet.




# API Limits

The following table details the API limits on the endpoints.

| Endpoint suffix | Limit (requests per hour) |
|---|---|
| /lastDatumChangeOn | *Unlimited* |
| /data | 60 |

The following table details the limits within the portal (UI).

| Function | Limit (requests per minute) |
|---|---|
| Adding a feed | 1 |

| | |
|---|---|
| Adding a source | 12 |
| Getting the last datum change on | *Unlimited* |
| Data request | 60 |

Note, the limits in determined from the timestamp of the last request made.

# Error Handling

## Common UI Errors

The following table details common UI errors.

| Error | Reason |
|---|---|
| Too many requests | You may have made too many data requests. See API Limits.<br><br>IMPORTANT: Remember to use the "lastDatumChangeOn" endpoint before requesting data. There are no limits on using that endpoint. See Detecting Data Changes. |

## Common API Errors

The following table details common API error responses.

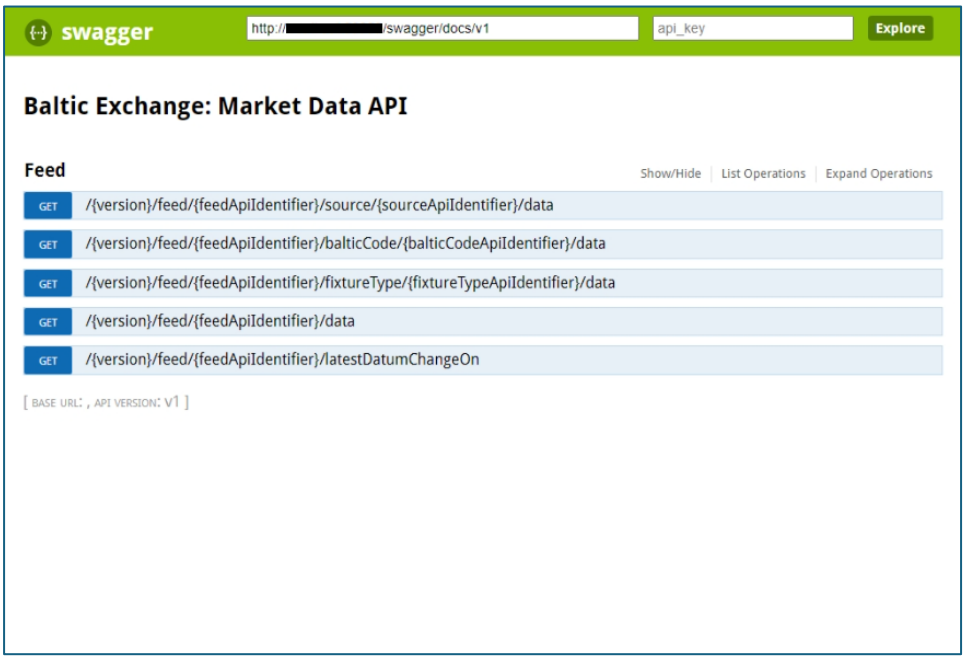
| HTTP Error Response | Reason |
|---|---|
| 401 (Unauthorised) | You may have used an incorrect value for the "x-api-key" header.<br><br>You can also receive this if you are no longer authorised to consume the API endpoints. If you think you should be, please contact support@balticexchange.com.<br><br>You will also get this response if your API key has expired. See API Key Management. |
| 404 (Not found) | You may have used an incorrect value for one of the following:<br><br>• version<br>• feedApiIdentifier<br>• sourceApiIdentifier<br>• balticCodeApiIdentifier<br>• fixtureTypeApiIdentifier<br><br>You may get this message if you no longer have access to a particular source due to permissions/licensing. If you think this has happened in error, please contact support@balticexchange.com. |

| | |
|---|---|
| | Occasionally, sources are deprecated. If this happens, you may get this error when directly making a data request for it. |
| 429 (Too many requests) | You may have made too many data requests for a given period. See API Limits.<br><br>IMPORTANT: Remember to use the "lastDatumChangeOn" endpoint before requesting data. There are no limits on using that endpoint. See Detecting Data Changes. |
| 500 (Internal server error) | You should not receive this as it means something internally has gone wrong. We are notified if this happens, and a fix will be developed and implemented.<br><br>If you are making a request, please try again in a few minutes as the fault may be intermittent.<br><br>If you continue to receive this error, please contact support@balticexchange.com. |

# Testing the API

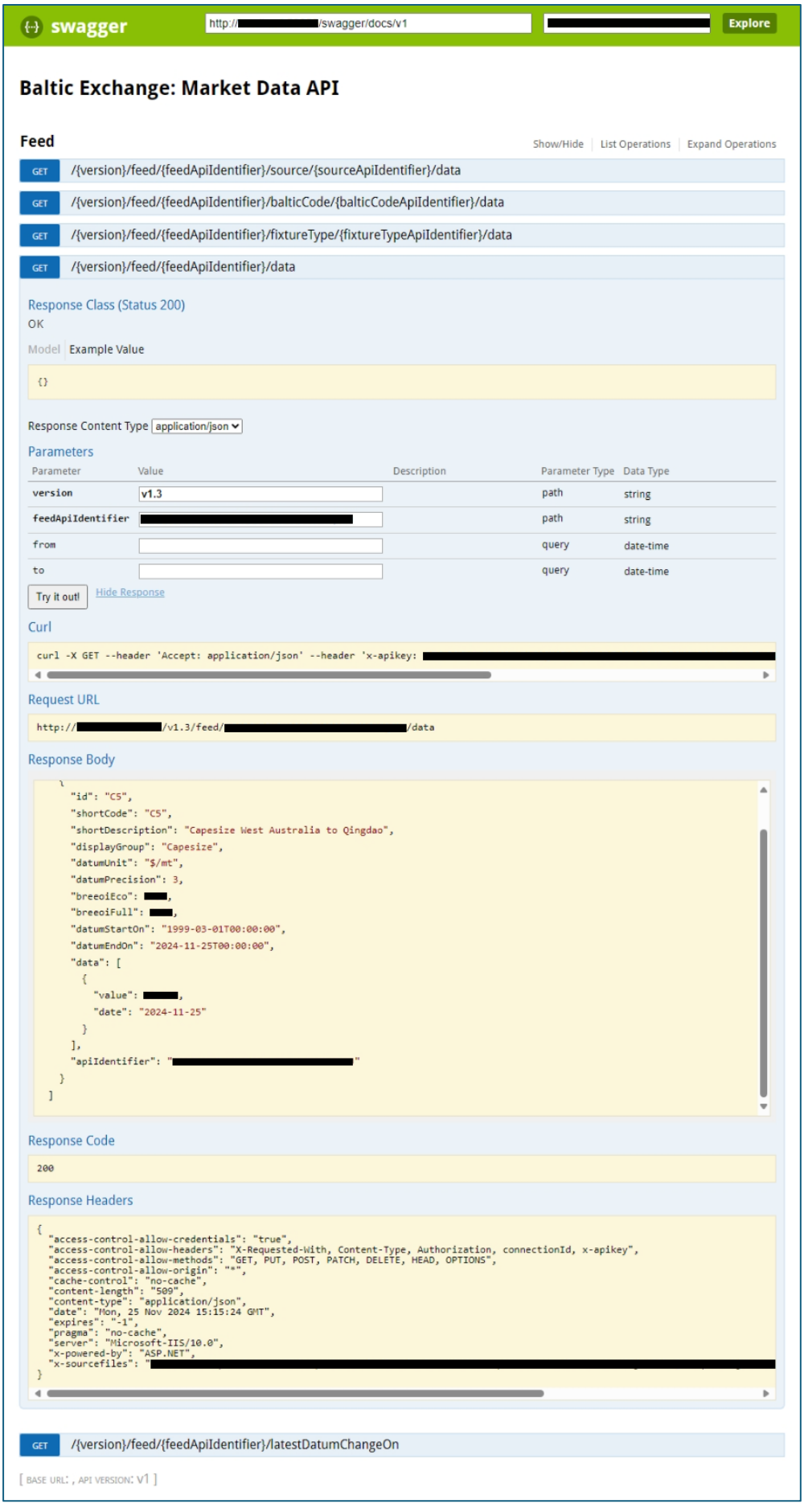
## Using Swagger

You can use Swagger to test requests and responses. It is available here: https://api.balticexchange.com/api/swagger/ui/index.




To try out the endpoints, ensure you have entered your API Key into the text field "api_key" and then click "Explore".

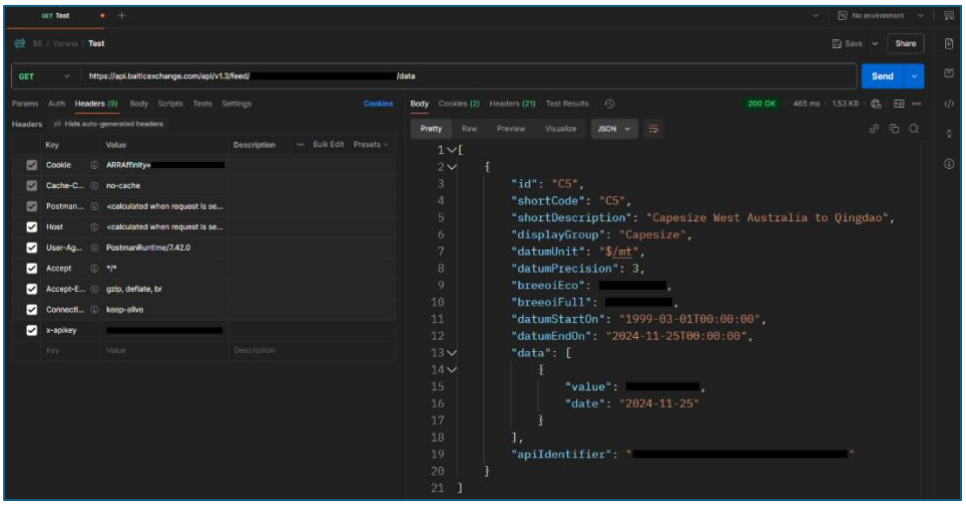
Here is an example of using the feed data endpoint.


swagger
http://[redacted]/swagger/docs/v1
Explore
Baltic Exchange: Market Data API
Feed
Show/Hide | List Operations | Expand Operations
GET /{version}/feed/{feedApiIdentifier}/source/{sourceApiIdentifier}/data
GET /{version}/feed/{feedApiIdentifier}/balticCode/{balticCodeApiIdentifier}/data
GET /{version}/feed/{feedApiIdentifier}/fixtureType/{fixtureTypeApiIdentifier}/data
GET /{version}/feed/{feedApiIdentifier}/data
Response Class (Status 200)
OK
Model | Example Value
{}
Response Content Type application/json
Parameters
Parameter | Value | Description | Parameter Type | Data Type
version | v1.3 | | path | string
feedApiIdentifier | [redacted] | | path | string
from | | | query | date-time
to | | | query | date-time
Try it out!
Hide Response
Curl
curl -X GET --header 'Accept: application/json' --header 'x-apikey: [redacted]
Request URL
http://[redacted]/v1.3/feed/[redacted]/data
Response Body
"id": "C5",
"shortCode": "C5",
"shortDescription": "Capesize West Australia to Qingdao",
"displayGroup": "Capesize",
"datumUnit": "$/mt",
"datumPrecision": 3,
"breeoiEco": [redacted],
"breeoiFull": [redacted],
"datumStartOn": "1999-03-01T00:00:00",
"datumEndOn": "2024-11-25T00:00:00",
"data": [
"value": [redacted],
"date": "2024-11-25"
],
"apiIdentifier": "[redacted]"
Response Code
200
Response Headers
"access-control-allow-credentials": "true",
"access-control-allow-headers": "X-Requested-With, Content-Type, Authorization, connectionId, x-apikey",
"access-control-allow-methods": "GET, PUT, POST, PATCH, DELETE, HEAD, OPTIONS",
"access-control-allow-origin": "*",
"cache-control": "no-cache",
"content-length": "509",
"content-type": "application/json",
"date": "Mon, 25 Nov 2024 15:15:24 GMT",
"expires": "-1",
"pragma": "no-cache",
"server": "Microsoft-IIS/10.0",
"x-powered-by": "ASP.NET",
"x-sourcefiles": "[redacted]
GET /{version}/feed/{feedApiIdentifier}/latestDatumChangeOn
[ BASE URL: , API VERSION: v1 ]

## Using Postman

You can use Postman to test your feed endpoints.

Here is an example of a feed data call.



# Appendix

## Schemas

| Format | Version | Link |
|---|---|---|
| JSON | V1 | https://api.balticexchange.com/assets/schemas/json/v1/feed_v1.schema.json |
| | V1.1 | https://api.balticexchange.com/assets/schemas/json/v1.1/feed_v1_1.schema.json |
| | V1.2 | https://api.balticexchange.com/assets/schemas/json/v1.2/feed_v1_2.schema.json |
| | V1.3 | https://api.balticexchange.com/assets/schemas/json/v1.3/feed_v1_3.schema.json |
| XML | Indices | https://api.balticexchange.com/assets/schemas/XML%20-%20legacy/indices/indices_schema.xsd |
| | Routes | https://api.balticexchange.com/assets/XML - legacy/routes/routes_schema.xsd |
| CSV | FFA | https://api.balticexchange.com/assets/CSV/FFA/schema.csv |
| | Physical | https://api.balticexchange.com/assets/CSV/Physical/schema.csv |


Baltic
Exchange