

EEX Market Data - API  
First Steps

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Ref. 01

› eex

› pxe

› ecc

› cltx

› epexspot

› nodal

› powernext

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## 1. What is an API?

API stands for **A**pplication **P**rograming **I**nterface. It is not a database or a server, but an access point that enables communication with a server. This programmed access point enables the data transfer between different systems.

## 2. What information do you need to get started?

### 2.1 Documents

All DataSource Products reference four-digit shortcodes. Behind every shortcode is a contract type. This is all gathered in our EEX Products (Shortcodes, WKN, ISIN, Vendor Codes, GoO) file. These shortcodes are used within the API requests.

When reading this First Steps Guide, please always have our complete User Guide on hand. The First Steps Guide is only an addition to the User Guide.

### 2.2 Escape Characters

If you want to address contract types, you can address the shortcodes from the above-mentioned file directly. If you are interested in a specific maturity, there are rules applying to all DataSource products on how the product codes are composed.

#### Example:

EEX French Power Base Month Future for May 2023

- o F7BM = EEX French Power Base Month Future (from above mentioned file)
  - o K = May (please find the full list of month codes in the User Guide)
  - o 23 = 2023
- F7BMK23

Depending on the product type, a sign is added at the front:

```
/E.PRODUCTCODE FOR EMISSION SPOT AND ALL FUTURES
-E.PRODUCTCODE FOR OPTIONS
#E.PRODUCTCODE FOR GAS SPOT
#E.PRODUCTCODE FOR INDICES
```

#### Example:

F7BM is a Future: /E.PRODUCTCODE → /E.F7BMK23

The Get request is a URL string, special characters will need to be escaped, because not all symbols are allowed in this type of request. All DataSource Products reference the same product codes for consistency and to continue this consistency within the API, escape characters are needed to adhere to the allowed symbols for URL requests.

For a full overview, please have a look into our User Guide in the chapter “Symbols”.

These are the escape characters that you will need the most:

Character	Escape Symbol
!	%21
#	%23
\$	%24
/	%2F
Space	%20

**Example:**

/E. F7BMK23 → %2FE. F7BMK23

### 3. How to set up a request

When starting to build a new request, it is important to choose the right request type for the data you want to see.

There are nine supported request methods. Below you will find a short explanation for every method. For the full overview of the required and optional parameters, please have a look at the User Guide.

#### 3.1 getPermissions

getPermissions returns all symbols permissioned for the user. This includes current and historical products. Further information about the products including meta data is available via getProduct or can be found in our EEX Products (Shortcodes, WKN, ISIN, Vendor Codes, GoO) file.

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access your permissions, please choose getPermissions → <https://api1.datasources.eex-group.com/getPermissions/>.
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getPermissions/xml?>. If you want to see all permissions, you are already finished.
4. If you want to see permissions for a specific commodity, you can specify in the next step. Choose from: POWER, NATGAS, AGRI, METALS, EMISSIONS, BIOMASS, FREIGHT → <https://api1.datasources.eex-group.com/getPermissions/json?commodity=natgas>

#### 3.2 getProduct

getProduct returns the metadata associated with a specific symbol or list of symbols. Metadata is information that is linked to the contract type and the specific maturity, like DeliveryStart/End and TradingStart/End.

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access metadata, please choose getProduct → <https://api1.datasources.eex-group.com/getProduct/>.

3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getProduct/xml?>.
4. Choose the product. If you want to get an overview, please find it in our EEX Products (Shortcodes, WKN, ISIN, Vendor Codes, GoO) file. If you are interested in the EEX German Power Base Month Future, you have to use the shortcode “DEBM” → <https://api1.datasources.eex-group.com/getProduct/xml?root=DEBM>

### 3.3 getDerivatives

This function returns settlements or trade results data for a specific day for a specific commodity, root or product. This request type is only applicable to Derivatives (Futures, Options).

#### Trades

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access trades of a specific day, please choose `getDerivatives` → <https://api1.datasources.eex-group.com/getDerivatives/>.
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getDerivatives/json>
4. The request differentiates between trades and results (settlement prices). Choose the data type you are interested in → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades>
5. Is the product you are interested in an Option or a Future? → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&productType=futures>
6. What trade date are you interested in? The format is YYYY-MM-DD → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&productType=futures&tradeDate=2023-04-18>
7. Choose a commodity, root (contract type) or product (contract type + specific maturity)
  - a. If you are interested in all trades for a commodity, you can access them all at once → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&productType=futures&tradeDate=2023-04-18&commodity=power>
  - b. If you are interested in a specific contract type, please address a root. This example shows the EEX French Power Base Month Future, that uses the shortcode “F7BM” → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&productType=futures&tradeDate=2023-04-18&root=F7BM>
  - c. If you are interested in a specific maturity, please address a product. For the syntax, please have a look into our User Guide. This example shows the May 2023 maturity of F7BM → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&productType=futures&tradeDate=2023-04-18&product=%2FE.F7BMK23>

#### Settlement Prices

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access trades of a specific day, please choose `getDerivatives` → <https://api1.datasources.eex-group.com/getDerivatives/>.

3. Choose between the following return formats: json, xml, csv  
→ <https://api1.datasources.eex-group.com/getDerivatives/json>
4. The request differentiates between trades and results (settlement prices). Choose the data type you are interested in → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results>
5. Is the product you are interested in an Option or a Future? → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&productType=futures>
6. What trade date are you interested in? The format is YYYY-MM-DD → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&productType=futures&tradeDate=2023-04-18>
7. Choose a commodity, root (contract type) or product (contract type + specific maturity)
  - a. If you are interested in all trades for a commodity, you can access them all at once  
→ <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&productType=futures&tradeDate=2023-04-18&commodity=power>
  - b. If you are interested in a specific contract type, please address a root. This example shows the EEX French Power Base Month Future, that uses the shortcode "F7BM" → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&productType=futures&tradeDate=2023-04-18&root=F7BM>
  - c. If you are interested in a specific maturity, please address a product. For the syntax, please have a look into our User Guide. This example shows the May 2023 maturity of F7BM → <https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&productType=futures&tradeDate=2023-04-18&product=%2FE.F7BMK23>

### 3.4 getSpot

This function returns spot results data of a specific day for gas and emissions. Results or trades can be retrieved for specific commodities or roots.

#### Trades

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access trades of a specific day, please choose getSpot → <https://api1.datasources.eex-group.com/getSpot/>.
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getSpot/json>
4. The request differentiates between trades and results (settlement prices). Choose the data type you are interested in → <https://api1.datasources.eex-group.com/getSpot/json?returnType=trades>
5. Is the contract you are interested in a gas spot or an emissions spot contract? → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=trades&commodity=NATGAS>
6. Which trade date are you interested in? → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=trades&commodity=NATGAS&&tradeDate=2022-10-09>  
If you want to see all contracts from a specific commodity, you are already finished.

- a. For natural gas, you can also filter by market area → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=trades&commodity=NATGAS&&tradeDate=2022-10-09&marketarea=the>
- b. You can also address specific roots:
  - i. This can happen in combination with a market area filter → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=trades&commodity=NATGAS&&tradeDate=2022-10-09&marketarea=the&GND1>
  - ii. Or without → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=trades&commodity=NATGAS&&tradeDate=2022-10-09&GND1>

## Results

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access results of a specific day, please choose `getSpot` → <https://api1.datasources.eex-group.com/getSpot/>.
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getSpot/json>
4. The request differentiates between trades and results (settlement prices). Choose the data type you are interested in → <https://api1.datasources.eex-group.com/getSpot/json?returnType=results>
5. Is the contract you are interested in a gas spot or an emissions spot contract? → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=results&commodity=NATGAS>
6. Which trade date are you interested in? → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=results&commodity=NATGAS&&tradeDate=2022-10-09>  
If you want to see all contracts from a specific commodity, you are already finished.
  - a. For natural gas, you can also filter by market area → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=results&commodity=NATGAS&&tradeDate=2022-10-09&marketarea=the>
  - b. You can also address specific roots:
    - i. This can happen in combination with a market area filter → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=results&commodity=NATGAS&&tradeDate=2022-10-09&marketarea=the&GND1>
    - ii. Or without → <https://api1.datasources.eex-group.com/getSpot/xml?returnType=results&commodity=NATGAS&&tradeDate=2022-10-09&GND1>

### 3.5 getAuction

This function returns emission auction results data for a specific day.

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access auction data, please choose `getAuction` → <https://api1.datasources.eex-group.com/getAuction/>.
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getAuction/json>
4. Which trade date are you interested in? → <https://api1.datasources.eex-group.com/getAuction/xml?tradeDate=2023-02-13>

### 3.6 getIndex

This function returns index results for a specific day.

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access indices, please choose `getIndex` → <https://api1.datasources.eex-group.com/getIndex/>.
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getIndex/xml>
4. Depending on the index type, you must address a specific TradeDate or a specific DeliveryDate. Please have a look into the User Guide to receive detailed information. This example shows how to address the
  - a. ECARBIX → <https://api1.datasources.eex-group.com/getIndex/xml?indexType=ECARBIX&tradeDate=2023-02-28>
  - b. APDD → <https://api1.datasources.eex-group.com/getIndex/?IndexType=APDD&DeliveryDate=2022-11-06>

### 3.7 getHistory

`getHistory` returns trade information across a range of days for a list of items.

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access indices, please choose `getIndex` → <https://api1.datasources.eex-group.com/getHistory>
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getHistory/json>
4. Choose a root you want to access, this example shows the EEX German Power Base Year Future with the shortcode "DEBY" → <https://api1.datasources.eex-group.com/getHistory/json?root=deby>
5. Are you requesting an option, a future, a spot contract or an index? → <https://api1.datasources.eex-group.com/getHistory/json?root=deby&producttype=future>
6. For the time range, you can choose between:
  - a. A range between two dates → <https://api1.datasources.eex-group.com/getHistory/json?root=deby&producttype=future&start=2023-01-03&end=2023-03-27>
  - b. Several days counting backwards from the current day → <https://api1.datasources.eex-group.com/getHistory/json?root=deby&producttype=future&daysback=10>

### 3.8 getQuote

`getQuote` returns the latest price information. The most recently stored value is returned for each field requested.

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access indices, please choose `getIndex` → <https://api1.datasources.eex-group.com/getQuote>



3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getQuote/json>
4. Choose which contracts you want to address
  - a. You can access a contract type like EEX THE Natural Gas Month Future “G0BM” → <https://api1.datasources.eex-group.com/getQuote/json?Root=G0BM>
  - b. Or a specific maturity like the June 2023 maturity for G0BM → <https://api1.datasources.eex-group.com/getQuote/json?product=%2FE.G0BMM23>

### 3.9 getIntraday

getIntraday returns intraday pricing **over a range of time** in a single day for a list of products and items for Bids, Asks and Trades.

1. Start with the APIs address → <https://api1.datasources.eex-group.com/>
2. Decide which method to use. Because you want to access indices, please choose `getIndex` → <https://api1.datasources.eex-group.com/getIntraday>
3. Choose between the following return formats: json, xml, csv → <https://api1.datasources.eex-group.com/getIntraday/xml?>
4. Choose a contract type or specific maturity. This example shows the root “DEBY” → <https://api1.datasources.eex-group.com/getIntraday/xml?root=DEBY>
5. Choose the timeslot you want to see. The format (including escape characters) is **YYYY-MM-DD%20hh:mm** → <https://api1.datasources.eex-group.com/getIntraday/xml?root=DEBY&start=2023-04-05%2008:00&end=2023-04-05%2011:00>

## 4. List of further example calls

Request Type	Example requests
getPermissions	<a href="https://api1.datasources.eex-group.com/getPermissions/json?commodity=power">https://api1.datasources.eex-group.com/getPermissions/json?commodity=power</a> <a href="https://api1.datasources.eex-group.com/getPermissions/json?commodity=agri">https://api1.datasources.eex-group.com/getPermissions/json?commodity=agri</a> <a href="https://api1.datasources.eex-group.com/getPermissions/json?commodity=emissions">https://api1.datasources.eex-group.com/getPermissions/json?commodity=emissions</a>
getProduct	<a href="https://api1.datasources.eex-group.com/getProduct/xml?root=FEUA">https://api1.datasources.eex-group.com/getProduct/xml?root=FEUA</a> <a href="https://api1.datasources.eex-group.com/getProduct/xml?root=G9BM,G9BQ,G9BY">https://api1.datasources.eex-group.com/getProduct/xml?root=G9BM,G9BQ,G9BY</a> <a href="https://api1.datasources.eex-group.com/getProduct/xml?root=FAPP">https://api1.datasources.eex-group.com/getProduct/xml?root=FAPP</a>
getDerivatives	<a href="https://api1.datasources.eex-group.com/getDerivatives/json?Commodity=POWER&amp;ReturnType=RESULTS&amp;TradeDate=2022-03-27&amp;ProductType=FUTURES">https://api1.datasources.eex-group.com/getDerivatives/json?Commodity=POWER&amp;ReturnType=RESULTS&amp;TradeDate=2022-03-27&amp;ProductType=FUTURES</a> <a href="https://api1.datasources.eex-group.com/getDerivatives?Commodity=NATGAS&amp;ReturnType=RESULTS&amp;TradeDate=2022-04-19&amp;ReturnFormat=XML&amp;ProductType=FUTURES">https://api1.datasources.eex-group.com/getDerivatives?Commodity=NATGAS&amp;ReturnType=RESULTS&amp;TradeDate=2022-04-19&amp;ReturnFormat=XML&amp;ProductType=FUTURES</a> <a href="https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&amp;productType=options&amp;tradeDate=2022-03-24&amp;root=ODFM,ODFQ,ODFY">https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&amp;productType=options&amp;tradeDate=2022-03-24&amp;root=ODFM,ODFQ,ODFY</a> <a href="https://api1.datasources.eex-group.com/getDerivatives/xml?returnType=results&amp;productType=futures&amp;tradeDate=2022-05-03&amp;Product=%2FE.FEUAZ22">https://api1.datasources.eex-group.com/getDerivatives/xml?returnType=results&amp;productType=futures&amp;tradeDate=2022-05-03&amp;Product=%2FE.FEUAZ22</a> <a href="https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&amp;productType=options&amp;tradeDate=2022-05-06&amp;root=O2BY">https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&amp;productType=options&amp;tradeDate=2022-05-06&amp;root=O2BY</a> <a href="https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&amp;productType=futures&amp;tradeDate=2022-03-28&amp;root=DEBY">https://api1.datasources.eex-group.com/getDerivatives/json?returnType=trades&amp;productType=futures&amp;tradeDate=2022-03-28&amp;root=DEBY</a> <a href="https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&amp;productType=futures&amp;tradeDate=2022-03-24&amp;root=DEBY,DEBQ,DEBM">https://api1.datasources.eex-group.com/getDerivatives/json?returnType=results&amp;productType=futures&amp;tradeDate=2022-03-24&amp;root=DEBY,DEBQ,DEBM</a>

<b>getSpot</b>	<a href="https://api1.datasources.eex-group.com/getSpot/json?returnType=results&amp;commodity=NATGAS&amp;marketarea=ETF&amp;tradeDate=2022-04-22&amp;root=EGSI">https://api1.datasources.eex-group.com/getSpot/json?returnType=results&amp;commodity=NATGAS&amp;marketarea=ETF&amp;tradeDate=2022-04-22&amp;root=EGSI</a> <a href="https://api1.datasources.eex-group.com/getSpot/json?returnType=results&amp;commodity=natgas&amp;tradeDate=2022-10-20">https://api1.datasources.eex-group.com/getSpot/json?returnType=results&amp;commodity=natgas&amp;tradeDate=2022-10-20</a> <a href="https://api1.datasources.eex-group.com/getSpot/json?returnType=results&amp;commodity=natgas&amp;tradeDate=2022-10-20&amp;root=GND1">https://api1.datasources.eex-group.com/getSpot/json?returnType=results&amp;commodity=natgas&amp;tradeDate=2022-10-20&amp;root=GND1</a> <a href="https://api1.datasources.eex-group.com/getSpot/json?returnType=trades&amp;commodity=natgas&amp;tradeDate=2022-10-20&amp;root=GWID">https://api1.datasources.eex-group.com/getSpot/json?returnType=trades&amp;commodity=natgas&amp;tradeDate=2022-10-20&amp;root=GWID</a>
<b>getAuction</b>	<a href="https://api1.datasources.eex-group.com/getAuction/xml?tradeDate=2023-02-14">https://api1.datasources.eex-group.com/getAuction/xml?tradeDate=2023-02-14</a>
<b>getIndex</b>	<a href="https://api1.datasources.eex-group.com/getIndex/xml?indexType=AG&amp;tradeDate=2023-02-16">https://api1.datasources.eex-group.com/getIndex/xml?indexType=AG&amp;tradeDate=2023-02-16</a> <a href="https://api1.datasources.eex-group.com/getIndex/?IndexType=APDD&amp;DeliveryDate=2022-11-06&amp;MarketArea=THE">https://api1.datasources.eex-group.com/getIndex/?IndexType=APDD&amp;DeliveryDate=2022-11-06&amp;MarketArea=THE</a> <a href="https://api1.datasources.eex-group.com/getIndex/xml?indexType=ECARBIX&amp;tradeDate=2023-02-28">https://api1.datasources.eex-group.com/getIndex/xml?indexType=ECARBIX&amp;tradeDate=2023-02-28</a> <a href="https://api1.datasources.eex-group.com/getIndex/xml?indexType=EGIX&amp;marketarea=TTF&amp;tradeDate=2023-03-08">https://api1.datasources.eex-group.com/getIndex/xml?indexType=EGIX&amp;marketarea=TTF&amp;tradeDate=2023-03-08</a> <a href="https://api1.datasources.eex-group.com/getIndex/xml?indexType=monthly&amp;tradeDate=2023-02-08">https://api1.datasources.eex-group.com/getIndex/xml?indexType=monthly&amp;tradeDate=2023-02-08</a>
<b>getHistory</b>	<a href="https://api1.datasources.eex-group.com/getHistory/json?product=product=%2FE.F7BMK23&amp;producttype=future&amp;start=2023-01-03&amp;end=2023-03-27">https://api1.datasources.eex-group.com/getHistory/json?product=product=%2FE.F7BMK23&amp;producttype=future&amp;start=2023-01-03&amp;end=2023-03-27</a> <a href="https://api1.datasources.eex-group.com/getHistory/json?product=%2FE.F7BYF25&amp;producttype=future&amp;daysback=10">https://api1.datasources.eex-group.com/getHistory/json?product=%2FE.F7BYF25&amp;producttype=future&amp;daysback=10</a>
<b>getQuote</b>	<a href="https://api1.datasources.eex-group.com/getQuote/json?product=%23E.TTF_GND1">https://api1.datasources.eex-group.com/getQuote/json?product=%23E.TTF_GND1</a> <a href="https://api1.datasources.eex-group.com/getQuote/json?Root=DEBY,DEBM">https://api1.datasources.eex-group.com/getQuote/json?Root=DEBY,DEBM</a>
<b>getIntraday</b>	<a href="https://api1.datasources.eex-group.com/getIntraday/xml?root=FDBM&amp;start=2021-05-11%2015:55&amp;end=2021-07-11%2016:00">https://api1.datasources.eex-group.com/getIntraday/xml?root=FDBM&amp;start=2021-05-11%2015:55&amp;end=2021-07-11%2016:00</a> <a href="https://api1.datasources.eex-group.com/getIntraday/xml?root=G0BM&amp;start=2023-04-11%2009:55&amp;end=2023-04-11%2013:00">https://api1.datasources.eex-group.com/getIntraday/xml?root=G0BM&amp;start=2023-04-11%2009:55&amp;end=2023-04-11%2013:00</a> <a href="https://api1.datasources.eex-group.com/getIntraday/xml?product=%2FE.F7BYF24&amp;start=2023-04-11%2009:55&amp;end=2023-04-11%2013:00">https://api1.datasources.eex-group.com/getIntraday/xml?product=%2FE.F7BYF24&amp;start=2023-04-11%2009:55&amp;end=2023-04-11%2013:00</a>