

OMS EOD API

Oslo Market Solutions

01/08/2020

Contents

1	Disclaimer	2
2	Changelog	2
3	Introduction	2
4	Authentication	3
5	Specification	3
6	Data types	3
7	Web services	4
7.1	Bonds	4
7.1.1	Endpoints	4
7.1.2	Fields	4
7.2	Bond indices	6
7.2.1	Endpoints	6
7.2.2	Fields	6
7.3	Equities	7
7.3.1	Endpoints	7
7.3.2	Fields	7
7.4	Equity Indices	9
7.4.1	Endpoints	9
7.4.2	Fields	9
7.5	Derivatives	10
7.5.1	Endpoints	10
7.5.2	Fields	10



1 Disclaimer

This document has been prepared on the basis of the best information available. OMS has taken reasonable efforts to ensure that the information in this publication is correct at the time of publication, but shall not be liable for decisions made in reliance on it. OMS will seek to provide notice to customers of changes being made to this document, but this notice cannot be guaranteed. Therefore, please note that this publication may be updated at any time. The information contained is therefore for guidance only. This document does not form part of the contractual documentation between the OMS and its customers.

2 Changelog

Issue	Date	Description
1.0.0	01/08/2020	Initial writeup

3 Introduction

The market information End of day product is a service from OMS where market information is distributed via JSON over HTTP.

4 Authentication

OMS will generate a shared secret that will act as a “password”. This key must be added to all queries that are sent to the service to authenticate your query. If this token is missing or otherwise invalid the request will be rejected. See the following example:

```
http://eod.oms.no/components?products=bonds&auth=secret={..very long token..}
```

Please note that this secret should be kept safe and not, for example, be exposed by running queries directly in a browser, as this will expose your secret to the browser’s developer tools. If a malicious actor gains access to your secret OMS can revoke a secret’s access to the API once abuse is detected. It is thus paramount that it is kept secure to avoid service disruptions by for example only exposing the secret to requests being run in serverside processes.

5 Specification

The data is exposed over the internet via HTTP using a JSON protocol. Generally speaking the data will look something like the below example. When we refer to field names in the following endpoints we will imply the below format, including the wrapping anonymous object, the rows array and the anonymous wrapping object of each row. The field names will refer to the fields in the inner values object.

```
{
  "rows": [
    {
      "key": "generators_0__EQNR_OSE",
      "values": {
        "SYMBOL": "EQNR",
        "SECTOR": "OSE",
        "LAST": 139.15,
        "TIME": 1593428772848,
        "CLOSE": null
      }
    }
  ]
}
```

6 Data types

In the below endpoints we will be referring to the following data types. This section describes them alongside an example of their values.

Data type	Example	Description
String	"foobar"	A simple JSON string
Integer	123	A JSON number without a fractional part
Decimal	123.123	A JSON number with a fractional part, fractional precision denoted in the parenthesis
Date	1593428772848	A UNIX timestamp representing the amount of milliseconds since the UNIX Epoch (00:00:00 UTC on 1 January 1970)

7 Web services

7.1 Bonds

The **Bonds** endpoint lists the bonds and certificates of Oslo Børs alongside their performance during the previous trading day. A variation exists for bonds and certificates listed on Nordic ABM, see below. Both return data in the same schema.

```
{
  "rows": [
    {
      "key": "example_bonds",
      "values": {
        "TRADE_DATE": 1596093703018,
        "INSTRUMENT_ID": 1234,
        "SYMBOL": "EXMPL",
        "ISIN": "NO001234567",
        "LONG_NAME": "Example Industries ltd.",
        "BID": 2750.9,
        "ASK": 2751.7,
        "OPEN": 2762.12,
        "HIGH": 2768.71,
        "LOW": 2640.5,
        "CLOSE": 2751.1,
        "VOLUME": 120,
        "CURRENCY": "NOK"
      }
    }
  ]
}
```

7.1.1 Endpoints

Name	URL
Bonds	https://eod.oms.no/components?product=bonds
Bonds ABM	https://eod.oms.no/components?product=bondsAbm

7.1.2 Fields

Field Name	Data type	Description
TRADE_DATE	Date	Trade Date
INSTRUMENT_ID	Integer	Unique number identifying the security
SYMBOL	String(16)	local code, often referred to as ticker symbol
ISIN	String(12)	ISIN number
LONG_NAME	String(34)	Full name of security
BID	Decimal(3)	Best bid price at market close
ASK	Decimal(3)	Best offered price at market close
OPEN	Decimal(3)	First official trade
HIGH	Decimal(3)	Highest official trade price
LOW	Decimal(3)	Lowest official trade price
CLOSE	Decimal(3)	Official close

Field Name	Data type	Description
VOLUME	Decimal(0)	Nominal volume traded
CURRENCY	String(3)	The price currency

7.2 Bond indices

The **Bond indices** endpoint lists all the bond indices listed on Oslo Børs alongside their performance the previous trading day.

```
{
  "rows": [
    {
      "key": "example_bond_indices",
      "values": {
        "TRADE_DATE": 1596093703018,
        "INSTRUMENT_ID": 1234,
        "SYMBOL": "EXMPL",
        "ISIN": "NO001234567",
        "LONG_NAME": "Example Industries ltd.",
        "BID": 2750.9,
        "ASK": 2751.7,
        "OPEN": 2762.12,
        "HIGH": 2768.71,
        "LOW": 2640.5,
        "CLOSE": 2751.1,
        "VOLUME": 120,
        "CURRENCY": "NOK"
      }
    }
  ]
}
```

7.2.1 Endpoints

Name	URL
Bond Indices	https://eod.oms.no/components?product=bondIndices

7.2.2 Fields

Field Name	Data type	Description
TRADE_DATE	Date	Trade Date
INSTRUMENT_ID	Integer	Unique number identifying the security
SYMBOL	String(16)	local code, often referred to as ticker symbol
LONG_NAME	String(34)	Full name of security
OPEN	Decimal(2)	Opening index value
HIGH	Decimal(2)	Highest calculated index value
LOW	Decimal(2)	Lowest calculated index value
CLOSE	Decimal(2)	Index value at close
CURRENCY	String(3)	The price currency

7.3 Equities

The **Equities** endpoint lists all the Shares, equity certificates, subscription rights, warrants, exchange traded funds and exchange traded notes listed on Oslo Børs. Variations exist for shares and subscription rights listed on Euronext Expand and Euronext Growth, see below. All these variations return the same schema.

```
{
  "rows": [
    {
      "key": "example_equities",
      "values": {
        "TRADE_TIME": 1596093703018,
        "INSTRUMENT_ID": 1234,
        "SYMBOL": "EXMPL",
        "ISIN": "NO001234567",
        "LONG_NAME": "Example Industries ltd.",
        "BID": 2750.9,
        "ASK": 2751.7,
        "OPEN": 2762.12,
        "HIGH": 2768.71,
        "LOW": 2640.5,
        "CLOSE": 2751.1,
        "VOLUME": 120,
        "TURNOVER": 84729944.67,
        "VWAP": 2751.0949,
        "CURRENCY": "NOK"
      }
    }
  ]
}
```

7.3.1 Endpoints

Name	URL
Equities Oslo Børs	https://eod.oms.no/components?product=equitiesOse
Equities Euronext Expand	https://eod.oms.no/components?product=equitiesExpand
Equities Euronext Growth	https://eod.oms.no/components?product=equitiesGrowth

7.3.2 Fields

Field Name	Data type	Description
TRADE_TIME	Date	Trade Date
INSTRUMENT_ID	Integer	Unique number identifying the security
SYMBOL	String(16)	local code, often referred to as ticker symbol
ISIN	String(12)	ISIN number
LONG_NAME	String(34)	Full name of security
BID	Decimal(3)	Best bid price at market close
ASK	Decimal(3)	Best offered price at market close
OPEN	Decimal(3)	First official trade
HIGH	Decimal(3)	Highest official trade price

Field Name	Data type	Description
LOW	Decimal(3)	Lowest official trade price
CLOSE	Decimal(3)	Official close
VOLUME	Decimal(0)	Number of shares traded
TURNOVER	Decimal(2)	Turnover by value (NOK)
VWAP	Decimal(4)	Volume weighted average price
CURRENCY	String(3)	The price currency

7.4 Equity Indices

The **Equity Indices** endpoint lists equity indices listed on Oslo Børs and Euronext Expand.

```
{
  "rows": [
    {
      "key": "example_equity_indices",
      "values": {
        "TRADE_TIME": 1596093703018,
        "INSTRUMENT_ID": 1234,
        "SYMBOL": "EXMPL",
        "LONG_NAME": "Example Industries ltd.",
        "OPEN": 2762.12,
        "HIGH": 2768.71,
        "LOW": 2640.5,
        "CLOSE": 2751.1,
        "CURRENCY": "NOK"
      }
    }
  ]
}
```

7.4.1 Endpoints

Name	URL
Equity indices	https://eod.oms.no/components?product=equityIndices

7.4.2 Fields

Field Name	Data type	Description
TRADE_TIME	Date	Trade Date
INSTRUMENT_ID	Integer	Unique number identifying the security
SYMBOL	String(16)	local code, often referred to as ticker symbol
LONG_NAME	String(34)	Full name of security
OPEN	Decimal(3)	First official trade
HIGH	Decimal(3)	Highest official trade price
LOW	Decimal(3)	Lowest official trade price
CLOSE	Decimal(3)	Official close
CURRENCY	String(3)	The price currency

7.5 Derivatives

The **Derivatives** endpoint has two variations, one which lists the futures and forwards listed on Oslo Børs, and one which lists options listed on Oslo Børs.

```
{
  "rows": [
    {
      "key": "example_derivatives",
      "values": {
        "TRADE_TIME": 1596093703018,
        "INSTRUMENT_ID": 1234,
        "UND_ID": 5678,
        "SYMBOL": "EXMPL",
        "ISIN": "NO001234567",
        "LONG_NAME": "Example Industries ltd.",
        "MATURITY_DATE": 1596093703018,
        "BID": 2750.9,
        "ASK": 2751.7,
        "OPEN": 2762.12,
        "HIGH": 2768.71,
        "LOW": 2640.5,
        "CLOSE": 2751.1,
        "VOLUME": 120,
        "OPEN_INTEREST": 300.24,
        "CURRENCY": "NOK"
      }
    }
  ]
}
```

7.5.1 Endpoints

Name	URL
Futures and forwards	https://eod.oms.no/components?product=futforw
Options	https://eod.oms.no/components?product=options

7.5.2 Fields

Field Name	Data type	Description
TRADE_TIME	Date	Trade Date
INSTRUMENT_ID	Integer	Unique number identifying the security
UND_ID	Integer	Cross reference to underlying Security Id
SYMBOL	String(16)	local code, often referred to as ticker symbol
ISIN	String(12)	ISIN number
LONG_NAME	String(34)	Full name of security
MATURITY_DATE	Date	Date the contract expires.
TICKER_UND	String(16)	Cross reference to underlying Symbol
BID	Decimal(3)	Best bid price at market close
ASK	Decimal(3)	Best offered price at market close

Field Name	Data type	Description
OPEN	Decimal(3)	First official trade
HIGH	Decimal(3)	Highest official trade price
LOW	Decimal(3)	Lowest official trade price
CLOSE	Decimal(3)	Last official trade
VOLUME	Decimal(2)	Number of contracts traded. Includes all types of trade.
OPEN_INTEREST	Decimal(2)	Open interest at start of trade date
CURRENCY	String(3)	The price currency