

LIV | EX

THE FINE WINE MARKET

Fine Wine Indices API documentation

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1. Introduction

1.1 About

Due to Liv-ex's unrivalled access to fine wine price data, the Liv-ex Indices are widely acknowledged to be the fine wine industry's leading benchmarks. This includes the Liv-ex Fine Wine 50, Liv-ex Fine Wine 100, Liv-ex Bordeaux 500, Liv-ex Investables Index, Liv-ex Fine Wine 1000 and its sub-indices.

1.2 Liv-ex indices services

The Liv-ex Indices Services enables subscribers to display the Liv-ex Fine Wine indices on their website or an internal system. The service can be used to show the index performance, as well as the historic series using suitable charting software. All data points will be updated automatically and in real time by Liv-ex. The following document includes three different data feeds:

- Liv-ex indices - performance
- Liv-ex indices - full historic series
- Liv-ex indices – last 5 year series

1.3 Technology

- REST used as a web service through which the two systems will exchange the data
- JSON will be used to get response in JSON text format
- XML will be used to get response in a xml format

User parameter standards for web service call:

User parameters are separated by '/' as name and value pairs and each pair is again separated by '/'. All parameter names are case sensitive and after the request URL follows a defined sequence of **{parameter name} / {parameter value}** pairs. Optional parameters are not required and can be left out in the call. **NOTE:** In the sections which follow, the sample data in all requests is highlighted **yellow**.

1.4 Client Configuration requirement

To set up the indices service it is necessary to provide Liv-ex with the static IP address that is used to access the service. A token for the IP address will be provided by Liv-ex.

Liv-ex will verify the combination of IP and token before returning the information to the client.

If this validation fails, Liv-ex will return an error code to the calling service.

2. Fine Wine Indices Performance Feed

2.1 About

This service allows you to get access to index performance data. This includes the index name, last updated date, index level, monthly-, year to date-, 1 year – and the 5 year change in %. The Liv-ex Fine Wine 50 Index includes the latest daily close, the Fine Wine 100, Fine Wine Investables, Bordeaux 500 and the Liv-ex Fine Wine 100 (incl. sub-indices) the latest monthly close. Depending on your preferences you can either choose to get the data for all Liv-ex Indices or from specific ones. The table below shows an example how this service is used on www.liv-ex.com, showing all indices.

Index 30/09/2013 (monthly close)	Level	MOM	YTD	1yr	5yr
Liv-ex Fine Wine 50	308.49	-1.87%	2.07%	3.18%	19.02%
Liv-ex Fine Wine 100	267.95	-1.75%	2.75%	3.03%	4.94%
Liv-ex Bordeaux 500	258.71	-0.69%	4.04%	5.36%	23.32%
Liv-ex Fine Wine Investables	286.00	-1.02%	3.65%	4.52%	19.30%

2.2 Indices performance request parameters

The Liv-ex Fine Wine indices performance data can be accessed with this URL <https://datafeed.liv-ex.com/df/indexperformance>. Depending on your preferences you can request the data in JSON or XML by adding /getjson or /getxml respectively. The token parameter and value is mandatory and will be provided by Liv-ex. If no symbol parameter is added the request the service will return the performance for all Liv-ex Fine Wine Indices. Some example requests and responses can be found below.

Parameter	Mandatory	Format	Description
token	Yes	String	Supplied by the Liv-ex
symbol	No	String	Comma separated index symbols. The available index symbols are: <ul style="list-style-type: none"> - LVX50 = Fine Wine 50 - LVX100 = Fine Wine 100 - LVXBDX500 = Bordeaux 500 - LVXINV = Fine Wine Investables - LX1000 = Fine Wine 1000 - BdxL50 = Bordeaux Legends 50 - Bgdy150 = Burgundy 150 - Cham50 = Champagne 50

			<ul style="list-style-type: none"> - Rho100 = Rhone 100 - Ital100 = Italy 100 - ROW50 = Rest of the World 50
--	--	--	---

2.3 Example Request:

Performance for all indices:

JSON REQUEST

```
https://datafeed.liv-ex.com/df/indexperformance/getjson/token/{token supplied by Liv-ex}
```

XML REQUEST

```
https://datafeed.liv-ex.com/df/indexperformance/getxml/token/{token supplied by Liv-ex}
```

Performance for a specific index:

JSON REQUEST

```
https://datafeed.liv-ex.com/df/indexperformance/getjson/token/{token supplied by Liv-ex}/symbol/{comma separated index symbols}
```

XML REQUEST

```
https://datafeed.liv-ex.com/df/indexperformance/getxml/token/{token supplied by Liv-ex}/symbol/{comma separated index symbols}
```

2.4 Example Responses:

Response for a single index request

JSON RESPONSE

```
{
  "index":{
    "symbol":"LVX50",
    "name":"Liv-ex Fine Wine 50",
    "date":"05-07-2013",
    "level":316.0,
    "momPerf":-1.14,
    "ytdPerf":4.56,
    "oneYearPerf":6.35,
    "fiveYearPerf":18.44
  }
}
```

XML RESPONSE

```
<indicesPerformance xmlns="https://datafeed.liv-
ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-
ex.com/schema/v1/services.xsd">
  <index symbol="LVX50" name="Liv-ex Fine Wine 50" date="05-07-2013" level="316.0" momPerf="-
1.14" ytdPerf="4.56" oneYearPerf="6.35" fiveYearPerf="18.44"/>
</indicesPerformance>
```

Responses for multiple index requests

JSON

```
{
  "index":{
    "symbol":"LVX100",
    "name":"Liv-ex Fine Wine 100",
    "date":"30-06-2013",
    "level":274.22,
    "momPerf":-0.71,
    "ytdPerf":5.15,
    "oneYearPerf":6.41,
    "fiveYearPerf":3.46
  },{
    "symbol":"LVX50",
    "name":"Liv-ex Fine Wine 50",
    "date":"05-07-2013",
    "level":316.0,
    "momPerf":-1.14,
    "ytdPerf":4.56,
    "oneYearPerf":6.35,
    "fiveYearPerf":18.44
  }
}
```

XML

```
<indicesPerformance xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-ex.com/schema/v1/services.xsd">
  <index symbol="LVX100" name="Liv-ex Fine Wine 100" date="30-06-2013" level="274.22" momPerf="-0.71" ytdPerf="5.15" oneYearPerf="6.41" fiveYearPerf="3.46"/>
  <index symbol="LVX50" name="Liv-ex Fine Wine 50" date="05-07-2013" level="316.0" momPerf="-1.14" ytdPerf="4.56" oneYearPerf="6.35" fiveYearPerf="18.44"/>
</indicesPerformance>
```

3. Full historic series of the Fine Wine Indices

3.1 About

This service allows you to get access to full historic data series of the Liv-ex Fine Wine Indices. This includes the index name, the date and the index level. The Liv-ex Fine Wine 50 Index is calculated daily since March 2010 and on a monthly period prior this date. All other indices are all published on a monthly basis.

3.2 Request Parameters

The service can be accessed using this URL <https://datafeed.liv-ex.com/df/indexfullhistory>. Depending on your preferences you can request the data in JSON or XML by adding /getjson or /getxml respectively. The token is mandatory and will be provided by Liv-ex. Below you can see a table with the valid symbols for each index. Several indices can be requested at the same time by adding the index symbols separated by a comma.

<i>Parameter</i>	<i>Mandatory</i>	<i>Format</i>	<i>Description</i>
token	Yes	String	Supplied by the Liv-ex
symbol	Yes	String	Comma separated index symbols. The available index symbols are: <ul style="list-style-type: none">- LVX50 = Fine Wine 50- LVX100 = Fine Wine 100- LVXBDX500 = Bordeaux 500- LVXINV = Fine Wine Investables- LX1000 = Fine Wine 1000- BDXI50 = Bordeaux Legends 50- Bgdy150 = Burgundy 150- Cham50 = Champagne 50- Rho100 = Rhone 100- Ital100 = Italy 100- ROW50 = Rest of the World 50

3.3 Example Requests

Request a single index.

JSON REQUEST

```
https://datafeed.liv-ex.com/df/indexfullhistory/getjson/token/{token supplied by Liv-ex}/symbol/{index symbol}
```

XML REQUEST

```
https://datafeed.liv-ex.com/df/indexfullhistory/getxml/token/{token supplied by Liv-ex}/symbol/{index symbols}
```

Request multiple indices.

JSON REQUEST

```
https://datafeed.liv-ex.com/df/indexfullhistory/getjson/token/{token supplied by Liv-ex}/symbol/{comma separated index symbols}
```

XML REQUEST

```
https://datafeed.liv-ex.com/df/indexfullhistory/getxml/token/{token supplied by Liv-ex}/symbol/{comma separated index symbols}
```

3.4 Example Responses

Response for a single index request

JSON

```
{ "index":[{  
  "symbol":"LVX100",  
  "name":"Liv-ex Fine Wine 100",  
  "data":[{  
    "date":"30-06-2013",  
    "level":274.22,  
    "change":null,  
    "pctChange":null  
  }],...{  
    "date":"31-07-2001",  
    "level":93.49,  
    "change":null,  
    "pctChange":null  
  }]  
}]  
}
```

XML

```
<indicesHistory xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-
ex.com/schema/v1/services.xsd">
  <index symbol="LVX100" name="Liv-ex Fine Wine 100">
    <data date="30-06-2013" level="274.22"/>
    <data date="31-05-2013" level="275.44"/>
    ...
    <data date="31-07-2001" level="93.49"/>
  </index>
</indicesHistory>
```

Response for multiple index requests

XML

```
<indicesHistory xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-
ex.com/schema/v1/services.xsd">
  <index symbol="LVX100" name="Liv-ex Fine Wine 100">
    <data date="30-06-2013" level="274.22"/>
    <data date="31-05-2013" level="275.44"/>
    ...
    <data date="31-07-2001" level="93.49"/>
  </index>
  <index symbol="LVX50" name="Liv-ex Fine Wine 50">
    <data date="05-07-2013" level="316.0"/>
    <data date="04-07-2013" level="316.84"/>
    ...
    <data date="31-12-1999" level="88.9"/>
  </index>
</indicesHistory>
```

JSON

```
{
  "index":[{
    "symbol":"LVX100",
    "name":"Liv-ex Fine Wine 100",
    "data":[{
      "date":"30-06-2013",
      "level":274.22,
      "change":null,
      "pctChange":null
    },...{
      "date":"31-07-2001",
      "level":93.49,
      "change":null,
      "pctChange":null
    }
  ]
}, {
  "symbol":"LVX50",
  "name":"Liv-ex Fine Wine 50",
  "data":[{
    "date":"05-07-2013",
    "level":316.0,
    "change":null,
    "pctChange":null
  },...{
    "date":"31-12-1999",
    "level":88.9,
    "change":null,
    "pctChange":null
  }
]}
}
```

4. Compact historic indices performance

4.1 About

This service allows you to access a reduced historic data set of the Liv-ex Fine Wine Indices. This includes the index name, date and the index level as well as the absolute and percentage change compared to the previous records close. The Liv-ex Fine Wine 50 Index is showing the daily close of the last 6 month, all other indices the monthly close of the last 5 years and the Fine Wine Investables the monthly close of the last ten years. It is possible to request a specific index as well as multiple indices.

4.2 Request Parameter

The full historic Liv-ex Fine Wine series can be accessed using this URL <https://datafeed.liv-ex.com/df/indexcompacthistory>. Depending on your viewing preferences you can request the data to be delivered in JSON or XML by adding /getjson or /getxml respectively. The token and symbol parameter are both mandatory in this request. The token will be provided by Liv-ex and the valid symbols for each index are shown in the table below. Several indices can be requested at the same time by adding the index symbols separated by a comma.

<i>Parameter</i>	<i>Mandatory</i>	<i>Format</i>	<i>Description</i>
token	Yes	String	Supplied by the Liv-ex
symbol	Yes	String	Comma separated index symbols. The available index symbols are: <ul style="list-style-type: none">- LVX50 = Fine Wine 50- LVX100 = Fine Wine 100- LVXBDX500 = Bordeaux 500- LVXINV = Fine Wine Investables- LX1000 = Fine Wine 1000- BDXI50 = Bordeaux Legends 50- Bgdy150 = Burgundy 150- Cham50 = Champagne 50- Rho100 = Rhone 100- Ital100 = Italy 100- ROW50 = Rest of the World 50

4.3 Example Request

Request with single index symbol.

JSON REQUEST

```
https://datafeed.liv-ex.com/df/indexcompacthistory/getjson/token/{token supplied by Liv-ex}/symbol/{index symbol}
```

XML REQUEST

```
https://datafeed.liv-ex.com/df/indexcompacthistory/getxml/token/{token supplied by Liv-ex}/symbol/{index symbol}
```

Request with multiple index symbols.

JSON REQUEST

```
https://datafeed.liv-ex.com/df/indexcompacthistory/getjson/token/{token supplied by Liv-ex}/symbol/{comma separated index symbols}
```

XML REQUEST

```
https://datafeed.liv-ex.com/df/indexcompacthistory/getxml/token/{token supplied by Liv-ex}/symbol/{comma separated index symbols}
```

4.4 Example Responses

Response for a single index request

JSON

```
{
  "index":{
    "symbol":"LVX100",
    "name":"Liv-ex Fine Wine 100",
    "data":{
      "date":"30-06-2013",
      "level":274.22,
      "change":-1.22,
      "pctChange":-0.44
    },{
      "date":"31-05-2013",
      "level":275.44,
      "change":-0.73,
      "pctChange":-0.26
    }
  }
}
```

```

    },... {
      "date":"30-06-2008",
      "level":266.57,
      "change":5.78,
      "pctChange":2.22
    }
  }
}

```

XML

```

<indicesHistory xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-
ex.com/schema/v1/services.xsd">
  <index symbol="LVX100" name="Liv-ex Fine Wine 100">
    <data date="30-06-2013" level="274.22" change="-1.22" pctChange="-0.44"/>
    <data date="31-05-2013" level="275.44" change="-0.73" pctChange="-0.26"/>
    ...
    <data date="30-06-2008" level="266.57" change="5.78" pctChange="2.22"/>
  </index>
</indicesHistory>

```

Response for multiple indices requests

XML

```

<indicesHistory xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-
ex.com/schema/v1/services.xsd">
  <index symbol="LVX100" name="Liv-ex Fine Wine 100">
    <data date="30-06-2013" level="274.22" change="-1.22" pctChange="-0.44"/>
    <data date="31-05-2013" level="275.44" change="-0.73" pctChange="-0.26"/>
    ...
    <data date="30-06-2008" level="266.57" change="5.78" pctChange="2.22"/>
  </index>
  <index symbol="LVX50" name="Liv-ex Fine Wine 50">
    <data date="05-07-2013" level="316.0" change="-0.84" pctChange="-0.27"/>
    <data date="04-07-2013" level="316.84" change="-0.16" pctChange="-0.05"/>
  </index>
</indicesHistory>

```

```
...
<data date="05-01-2013" level="303.27" change="0.0" pctChange="0.0"/>
</index>
</indicesHistory>
```

JSON

```
{ "index":{
  "symbol":"LVX100",
  "name":"Liv-ex Fine Wine 100",
  "data":{
    "date":"30-06-2013",
    "level":274.22,
    "change":-1.22,
    "pctChange":-0.44
  },... {
    "date":"30-06-2008",
    "level":266.57,
    "change":5.78,
    "pctChange":2.22
  }
},{
  "symbol":"LVX50",
  "name":"Liv-ex Fine Wine 50",
  "data":{
    "date":"05-07-2013",
    "level":316.0,
    "change":-0.84,
    "pctChange":-0.27
  },...{
    "date":"05-01-2013",
    "level":303.27,
    "change":0.0,
    "pctChange":0.0
  }
}}
```

5. Error responses:

5.1 E000: Internal server error

If you receive this response there is an issue on our server. Currently our data feeds have an uptime from 99.9% and you should not receive this error message. However, if you receive this message please contact the data team (data@liv-ex.com) and we will fix this issue as soon as possible.

JSON

```
{  
  "error": {  
    "code": "E000",  
    "message": "Internal server error "  
  }  
}
```

XML

```
<?xml version="1.0" encoding="UTF-8"?>  
<errors xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-  
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/service/schema/v1/services.xsd">  
  <error>  
    <code>E000</code>  
    <message> Internal server error </message>  
  </error>  
</errors>
```

5.2 E002: Access denied, Either token or IP address or service not mapped

Error code when the IP, token and service combination is not valid. Please review the IP address for which the service is registered and the token provided by Liv-ex. If the problem still exists please send us the link you are using to request the data to data@liv-ex.com.

JSON

```
{  
  "error": {  
    "code": "E002",  
    "message": "Access denied, Either token or IP address or service not mapped"}  
}
```


XML

```
<?xml version="1.0" encoding="UTF-8"?>
<errors xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-
ex.com/service/schema/v1/services.xsd">
  <error>
    <code>E002</code>
    <message>Access denied, Either token or IP address or service not mapped</message>
  </error>
</errors>
```

5.3 V001: Mandatory field missing

A mandatory field is missing or it spelled wrong. Please make sure that you have added the parameters correctly.

JSON

```
{ "code": "V001",
  "message": "Mandatory field missing " }
```

XML

```
<error xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-
ex.com/schema/v1/services.xsd">
  <code>V001</code>
  <message> Mandatory field missing</message>
</error>
```

5.4 R001: No data found

This error message indicates that the symbol value you have added is not recognised. Please make sure you have entered the index short code directly. The available codes are: LVX50, LVX100, LVXBDX500 and LVXINV.

JSON

```
{ "code": "R001",  
  "message": "No data found" }
```

XML

```
<error xmlns="https://datafeed.liv-ex.com/services" xmlns:xsi="https://www.w3.org/2001/XMLSchema-  
instance" xsi:schemaLocation="https://datafeed.liv-ex.com/services https://datafeed.liv-  
ex.com/schema/v1/services.xsd">  
  <code>R001</code>  
  <message>No data found</message>  
</error>
```