LIV|EX

THE FINE WINE MARKET

My Positions API v1

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1. Purpose

To provide the API end point information and examples of the web services available for My Positions.

2. Glossary of Terms

Term	Meaning
LWIN	LWIN - the Liv-ex Wine Identification Number – serves as a universal wine identifier for the wine trade. LWIN is a unique seven to eighteen-digit numerical code that can be used to quickly and accurately identify a product. LWIN allows wine companies to keep their preferred naming system, while introducing a new universal code.
Wine	The word wine below is referring to a specific wine (the producer and brand, grape or vineyard), vintage and unit size combination.
Bid	A buyer places a bid on the Exchange for buying a certain amount of wine.
Offer	A seller places an offer on the Exchange for selling a certain amount of wine.
Order	Order is a generic term for both bid/offer.
SIB	Standard in Bond trade terms: https://www.liv-ex.com/knowledge/liv-ex-trading-contracts/
SEP	Standard En Primeur: https://www.liv-ex.com/knowledge/liv-ex-trading-contracts/
Special	Special contract trade terms: https://www.liv-ex.com/knowledge/liv-ex-trading-contracts/
Contract Type	Contract type is a generic term for SIB, SEP or Special (X).

3. Technical Standards

- Permitted users will be issued with a unique token (CLIENT_KEY) and password (CLIENT_SECRET) combination to control the access for all the web services covered under Exchange Integration.
- The web services will consume and produce both XML and JSON. The user can provide the content type in the request header. If the user does not provide any information, then the default content type will be JSON.
- The service supports ISO 8601.
- The service only support HTTPS protocol for client and server communications.
- The API will support the following methods:
  - POST for create operation
- Pretty printing for output readability only is supported if required
- Compression for bandwidth savings are used
- Authentication mechanism will be custom based on CLIENT_KEY and CLIENT_SECRET

4. Request Header

This information will be used to authenticate valid access to the REST API. Each user will have to provide the following information in the request header.

Parameter

Name	Mandatory	Description
CLIENT_KEY	Y	A valid GUID which will be unique for each user.
CLIENT_SECRET	Y	Password/Secret for the merchants CLIENT_KEY.
ACCEPT	Y	Accept header is a way for a client to specify the media type of the response content it is expecting. The values for the content type will be application/json or application/xml. If no/ invalid content type is found in the request, then JSON format will be used by default.
CONTENT-TYPE	Y for POST requests	Content-type is a way to specify the media type of request being sent from the client to the server. The values for the content type will be application/json or application/xml. If no/ invalid content type is found in the request, then JSON format will be used by default.

Example header (JSON)

```
CLIENT_KEY: 12A34BC56-DE7F-89G0-H1J2345K678L
CLIENT_SECRET: dummy_password
ACCEPT: application/json
CONTENT-TYPE: application/json
```

Invalid header (JSON response)

```
{
    "status": "Unauthorized",
    "httpCode": "401",
    "message": "Request was unsuccessful",
    "livexCode": "R000"
    "apiInfo": {
        "version": "1.0",
        "timestamp": 1518524979121,
        "provider": "Liv-ex"
    }
}
```

Invalid header (XML response)

```
<Response>
    <Status>Unauthorized</Status>
    <HttpCode>401</Code>
    <Message>Request was unsuccessful.</Message>
    <LivexCode>R001</LivexCode>
     <ApiInfo>
        <Version>1.0</Version>
        <Timestamp>2017-11-04T11:12:30</Timestamp>
        <Provider>Liv-ex</Provider>
    </ApiInfo>
<Response>
```

5. API Listing

5.1 My Positions service (POST method)

Description

This service can be used to request live bid and offer exposure from Liv-ex exchange platform.

The only mandatory request attribute is ‘currency’. Calling the service with just this attribute will result in all bids and offers being returned. The remaining non-mandatory attributes can be used to filter results as required.

Base URI

exchange/v1/myPositions

Request Parameters

Name	Mandatory	Description
currency	Y	Values: ‘GBP’, ‘EUR’, ‘CHF’, ‘USD, ‘HKD’, ‘JPY’, ‘SGD’, ‘GBP/BTT’, ‘EUR/BTT’, ‘CHF/BTT’ Type: alphanumeric
lwin	N	LWIN11, LWIN16 or LWIN18. Multiple values are permitted. Type: integer
orderType	N	Values: ‘all’, ‘bid’, ‘offer’’. Multiple values are permitted. Type: alphanumeric
orderStatus	N	Values: ‘all’, ‘live’, ‘suspended'. Multiple values are permitted. Type: alphanumeric
orderGUID	N	The Liv-ex order identifier. Enables querying of a specific order. Attribute is ignored if lwin value is provided. Multiple values are permitted. Type: 128-bit alphanumeric
onlyExpiring	N	Filter results to only show order positions that are due to expire in the next 7 days. Type: Boolean true/false
merchantRef	N	Query by reference text. Parital string input is permitted. 30-character limit. Type: alphanumeric

Sample Request Body

JSON Request (all positions)

```
{
    "currency": "GBP"
}
```

JSON Request (specific positions)

```
{
    "currency": "GBP",
    "orderType": ["bid","offer"],
    "orderStatus": ["live"],
    "onlyExpiring": false
}
```

XML Request (all positions)

```
<MyPositions>
    <currency>GBP</currency>
</MyPositions>
```

XML Request (multiple orders)

```
<MyPositions>
    <currency>GBP</currency>
    <orderType>bid</orderType>
    <orderType>offer</orderType>
    <orderStatus>live</orderStatus>
    <onlyExpiring>false</onlyExpiring>
</MyPositions>
```

Sample Response Body

The Positions service will respond with HTTP Code 200 OK in a successful response. If the optional LWIN attribute is present in the request, LWIN length will determine the depth of data returned:

LWIN11: Response contains all order positions for the wine and vintage specified.

LWIN16: Response contains all order positions for the wine, vintage and bottle size specified.

LWIN18: Response contains all order positions for the wine, vintage, pack and bottle size specified.

Response parameters

Name	Description
lwin	LWIN11 / LWIN18 Type: integer
wineName	The LWIN wine name description e.g. ‘Grand Puy Lacoste’ Type: alphanumeric
shortRegion	The shorthand LWIN region description e.g. ‘bdxr’ for red Bordeaux Type: 3 or 4-character alphanumeric
vintage	Type: 4-digit integer
currency	The currency format of all pricing data contained in the response Type: alphanumeric
iwp	link to the IWP page of the LWIN returned. Type: alphanumeric
packSize	The LWIN pack size description e.g. ‘06’ Type: 2-digit integer
bottleSize	The LWIN bottle size description e.g. ‘00750’ Type: 5-digit integer

contractType	All, SIB, SEP, X Type: alphanumeric
dutyPaid	*null unless contractType = X* States whether stock offered on Special contract has a tax status of duty paid. If 'false' stock should be considered In Bond (IB) Type: Boolean 'true' or 'false'
minimumQty	States whether the seller has placed a minimum volume of units on the trade. Standard Liv-ex terms (SIB) is a minimum quantity of 1 Type: integer
deliveryPeriod	States the lead time on the offer in weeks. Standard Liv-ex terms (SIB) are 2 weeks. If deliveryPeriod = 0, the offer is Special Now Type: integer
condition	*null unless contractType = X* Text field that states any issues with the stock or its packaging Type: string
photoId	The photo resource ID Type: integer
lowResUrl	HTTP link to a low-resolution version of the photo resource Type: alphanumeric
highResUrl	HTTP link to a high-resolution version of the photo resource Type: alphanumeric
price	Type: double
quantity	Type: integer
orderGuid	The GUID of the bid/offer position. For priceType = 'list' this attribute will show as null Type: 128-bit hexadecimal
orderType	Values: 'bid', 'offer' Type: alphanumeric
orderStatus	Values: 'live', 'suspended' Type: alphanumeric
isBlocked	States whether the position is blocked by the Liv-ex system. Transactions on this order position are not permitted whilst the block is in place Type: Boolean true/false
merchantRef	The reference field attached to the order position Type: Boolean true/false
expiryDate	Type: date (epoch time if JSON)
isExpiring	Stated if the order position is due to expire in the next 7 days Type: Boolean true/false
lastUpdateTime	Type: date (epoch time if JSON)
spreadPercentage	The % difference between the bid and offer prices. If prices are not present, value = null. Type: double ***Important:*** *This value should <u>not</u> be used when making trading decisions. spreadPercentage is used internally by Liv-ex for UI sorting. The value is calculated GBP-GBP so may appear incorrect when calling in non-GBP currencies.*

JSON Response

The response is sent per request.

```
{
    "status": "OK",
    "httpCode": "200",
    "message": "Request completed successfully.",
    "internalErrorCode": "R001",
    "apiInfo": {
        "version": "1.0",
        "timestamp": 1529675746641,
        "provider": "Liv-ex"
    },
    "positions": [
        {
            "lwin": "10081081998",
            "wineName": "Cheval Blanc",
            "shortRegion": "bdxr",
            "vintage": "1998",
            "currency": "GBP",
            "iwp": "https://qa-web.liv-ex.com/individualWine.do?vinWinId=819",
            "status": [
                {
                    "lwin": "100810819980600750",
                    "packSize": "06",
                    "bottleSize": "00750",
                    "contractType": "SIB",
                    "special": {
                        "dutyPaid": false,
                        "minimumQty": 1,
                        "deliveryPeriod": 2,
                        "condition": null,
                        "photos": []
                    },
                    "price": 3000,
                    "quantity": 2,
                    "orderGuid": "d6f2fd9a-67c5-4442-98f9-f53f4d6191ac",
                    "orderType": "Offer",
                    "orderStatus": "Live",
                    "isBlocked": false,
                    "merchantRef": null,
                    "expiryDate": 1537451691000,
                    "isExpiring": false,
                    "lastUpdateTime": 1529675691000,
                    "spreadPercentage": 4.53
                },
                {
                    "lwin": "100810819980600750",
                    "packSize": "06",
                    "bottleSize": "00750",
                    "contractType": "X",
                    "special": {
                        "dutyPaid": true,
                        "minimumQty": 1,
                        "deliveryPeriod": 2,
                        "condition": null,
                        "photos": []
                    },
                    "price": 2882,
                    "quantity": 1,
                    "orderGuid": "3f82709e-489b-40db-8826-5e7568dd4758",
                    "orderType": "Offer",
                    "orderStatus": "Live",
                    "isBlocked": false,
                    "merchantRef": "abcdefghijklmnopqrstuvwxyz1234",
                    "expiryDate": 1537186663000,
                    "isExpiring": false,
                    "lastUpdateTime": 1529410663000,
                    "spreadPercentage": null
                }
            ],
            "errors": null
        },
        {
            "lwin": "11020372015",
            "wineName": "Sassicaia",
            "shortRegion": "ita",
            "vintage": "2015",
            "currency": "GBP",
            "iwp": "https://qa-web.liv-ex.com/individualWine.do?vinWinId=280960",
            "status": [
                {
                    "lwin": "110203720150600750",
                    "packSize": "06",
                    "bottleSize": "00750",
                    "contractType": "SIB",
                    "special": {
                        "dutyPaid": false,
                        "minimumQty": 1,
                        "deliveryPeriod": 2,
                        "condition": null,
                        "photos": []
                    },
                    "price": 570,
                    "quantity": 30,
                    "orderGuid": "85d5d456-3ebf-443a-b35c-4e90e2a40075",
                    "orderType": "Bid",
                    "orderStatus": "Live",
                    "isBlocked": false,
                    "merchantRef": "nick time test live",
                    "expiryDate": 1529622000000,
                    "isExpiring": true,
                    "lastUpdateTime": 1529410663000,
                    "spreadPercentage": null
                }
            ],
            "errors": null
        }
    ],
    "errors": null
```

Invalid JSON response

```
{
    "status": "Bad Request",
    "httpCode": "400",
    "message": "Request was unsuccessful.",
    "internalErrorCode": "R000",
    "apiInfo": {
        "version": "1.0",
        "timestamp": 1529675934161,
        "provider": "Liv-ex"
    },
    "positions": [
        {
            "lwin": null,
            "wineName": null,
            "shortRegion": null,
            "vintage": null,
            "currency": null,
            "iwp": null,
            "status": null,
            "errors": {
                "error": [
                    {
                        "code": "V064",
                        "message": "invalid / incorrect lwin and vintage: [12345672009]
combination."
                    }
                ]
            }
        }
    ],
    "errors": null
}
```

XML Response

The response is sent per request.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MyPosition xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="https://api.liv-ex.com/v1 https://api.liv-
ex.com/schema/v1/services.xsd">
    <Status>OK</Status>
    <HttpCode>200</HttpCode>
    <Message>Request completed successfully.</Message>
    <InternalErrorCode>R001</InternalErrorCode>
    <ApiInfo>
        <Version>1.0</Version>
        <Timestamp>2018-06-22T14:57:46.566+01:00</Timestamp>
        <Provider>Liv-ex</Provider>
    </ApiInfo>
    <positions>
        <lwin>10081081998</lwin>
        <wineName>Cheval Blanc</wineName>
        <shortRegion>bdxr</shortRegion>
        <vintage>1998</vintage>
        <currency>GBP</currency>
        <iwp>https://qa-web.liv-ex.com/individualWine.do?vinWinId=819</iwp>
        <status>
            <lwin>100810819980600750</lwin>
            <packSize>06</packSize>
            <bottleSize>00750</bottleSize>
            <contractType>SIB</contractType>
            <special>
                <dutyPaid>false</dutyPaid>
                <minimumQty>1</minimumQty>
                <deliveryPeriod>2</deliveryPeriod>
                <condition xsi:nil="true"/>
            </special>
            <price>3000.0</price>
            <quantity>2</quantity>
            <orderGuid>d6f2fd9a-67c5-4442-98f9-f53f4d6191ac</orderGuid>
            <orderType>Offer</orderType>
            <orderStatus>Live</orderStatus>
            <isBlocked>false</isBlocked>
            <merchantRef xsi:nil="true"/>
            <expiryDate>2018-09-20T14:54:51+01:00</expiryDate>
            <isExpiring>false</isExpiring>
            <lastUpdateTime>2018-06-22T14:54:51+01:00</lastUpdateTime>
            <spreadPercentage>4.53</spreadPercentage>
        </status>
        <status>
            <lwin>100810819980600750</lwin>
            <packSize>06</packSize>
            <bottleSize>00750</bottleSize>
            <contractType>X</contractType>
            <special>
                <dutyPaid>true</dutyPaid>
                <minimumQty>1</minimumQty>
                <deliveryPeriod>2</deliveryPeriod>
                <condition xsi:nil="true"/>
            </special>
            <price>2882.0</price>
            <quantity>1</quantity>
            <orderGuid>3f82709e-489b-40db-8826-5e7568dd4758</orderGuid>
            <orderType>Offer</orderType>
            <orderStatus>Live</orderStatus>
            <isBlocked>false</isBlocked>
            <merchantRef>abcdefghijklmnopqrstuvwxyz1234</merchantRef>
            <expiryDate>2018-09-17T13:17:43+01:00</expiryDate>
            <isExpiring>false</isExpiring>
            <lastUpdateTime>2018-06-19T13:17:43+01:00</lastUpdateTime>
            <spreadPercentage xsi:nil="true"/>
        </status>
        <errors xsi:nil="true"/>
    </positions>
    <positions>
        <lwin>11020372015</lwin>
        <wineName>Sassicaia</wineName>
        <shortRegion>ita</shortRegion>
        <vintage>2015</vintage>
        <currency>GBP</currency>
        <iwp>https://qa-web.liv-ex.com/individualWine.do?vinWinId=280960</iwp>
        <status>
            <lwin>110203720150600750</lwin>
            <packSize>06</packSize>
            <bottleSize>00750</bottleSize>
            <contractType>SIB</contractType>
            <special>
                <dutyPaid>false</dutyPaid>
                <minimumQty>1</minimumQty>
                <deliveryPeriod>2</deliveryPeriod>
                <condition xsi:nil="true"/>
            </special>
            <price>570.0</price>
            <quantity>30</quantity>
            <orderGuid>85d5d456-3ebf-443a-b35c-4e90e2a40075</orderGuid>
            <orderType>Bid</orderType>
            <orderStatus>Live</orderStatus>
            <isBlocked>false</isBlocked>
            <merchantRef>nick time test live</merchantRef>
            <expiryDate>2018-06-22T00:00:00+01:00</expiryDate>
            <isExpiring>true</isExpiring>
            <lastUpdateTime>2018-06-19T13:17:43+01:00</lastUpdateTime>
            <spreadPercentage xsi:nil="true"/>
        </status>
        <errors xsi:nil="true"/>
    </positions>
</MyPosition>
```

Invalid XML Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<MyPosition xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="https://api.liv-ex.com/v1 https://api.liv-
ex.com/schema/v1/services.xsd">
    <Status>Bad Request</Status>
    <HttpCode>400</HttpCode>
    <Message>Request was unsuccessful.</Message>
    <InternalErrorCode>R000</InternalErrorCode>
    <ApiInfo>
        <Version>1.0</Version>
        <Timestamp>2018-06-22T14:59:27.973+01:00</Timestamp>
        <Provider>Liv-ex</Provider>
    </ApiInfo>
    <positions>
        <lwin xsi:nil="true"/>
        <wineName xsi:nil="true"/>
        <shortRegion xsi:nil="true"/>
        <vintage xsi:nil="true"/>
        <currency xsi:nil="true"/>
        <iwp xsi:nil="true"/>
        <errors>
            <error>
                <code>V064</code>
                <message>invalid / incorrect lwin and vintage : [12345672009]
combination.</message>
            </error>
        </errors>
    </positions>
</MyPosition>
```

6. Response Codes

This section describes the response codes that will be returned by the Exchange Integration services.

Code	Message
R000	Request was unsuccessful
R001	Request completed successfully
R002	Request partially completed

6.1 Request validation error codes

Code	Message
V000	Mandatory field missing
V001	Merchant is not allowed to access the requested feed
V002	Invalid parameter(s)
V004	Invalid number parameter: positive number expected for <paramName>
V005	Merchant is not active
V012	Invalid request headers. Please provide value for header <header name>

V018	Mandatory field missing (<fieldName>).
V056	GUID is not available or does not exist
V058	Invalid / incorrect LWIN: [<value>]. Please provide a valid LWIN11, LWIN16 or LWIN18 code.
V059	Invalid / incorrect contractType: [<value>]. Possible values are 'sib', 'sep', 'x' or 'all'.
V061	invalid / incorrect currrency: [<value>]. Possible values are 'gbp', 'eur', 'chf', 'usd', 'hkd', 'jpy', 'sgd', 'gbp/btt', 'eur/btt', 'chf/btt'.
V066	Invalid / incorrect orderStatus: [<value>]. Possible values are ‘live’, ‘suspended’, ‘all’.
V067	Invalid / incorrect onlyExpiring: [<value>]. Possible values are ‘true’, ‘false’.
V068	Invalid / incorrect orderType: [<value>]. Possible values are ‘bid’, ‘offer’, ‘all’.

6.2 HTTP Status codes

HTTP defines a bunch of meaningful status codes that can be returned from our API. These can be leveraged to help our API Merchants/consumers route their responses accordingly:

Code	Message
200 OK	Response to a successful GET, POST, PUT, DELETE. Can also be used for a POST that doesn't result in a creation.
201 Created	Response to a POST that results in a creation.
202 Accepted	The request has been accepted and will be processed later. It is a classic answer to asynchronous calls (for better UX or performances).
204 No Content	Response to a successful request that won't be returning a body (like a DELETE request)
400 Bad Request	The request is malformed, such as if the body does not parse
401 Unauthorized	When no and/or invalid authentication details are provided. Can also be used to trigger an auth popup if API is used from a browser
403 Forbidden	When authentication succeeded but authenticated user doesn't have access to the resource
404 Not Found	When a non-existent resource is requested
405 Method Not Allowed	When an HTTP method is being requested that isn't allowed for the authenticated user

406 Not Acceptable	Nothing matches the Accept-* Header of the request. As an example, you ask for an XML formatted resource, but it is only available as JSON.
409 Conflict	Indicates one or more supplied parameters are triggering a validation error. A relevant TR code should be returned in the response.
410 Gone	Indicates that the resource at this end point is no longer available. Useful as a blanket response for old API versions
415 Unsupported Media Type	If incorrect content type was provided as part of the request
422 Unprocessable Entity	Used for validation errors. Should be used if the server cannot process the entity, e.g. if an image cannot be formatted or mandatory fields are missing in the payload.
429 Too Many Requests	When a request is rejected due to rate limiting
500 Internal Server Error	The general catch-all error when the server-side throws an exception. The request may be correct, but an execution problem has been encountered at our end.

7. Appendix 1 – Special contracts types

Special contracts (contractType = 'X') carry four attributes that define the tax status, minimum volume, lead time and condition of a specific offer. Attributes can be combined in various ways depending on the status of the stock.

Special attribute	Meaning
dutyPaid	States whether the stock offered on the Special contract has a tax status of duty paid or not. If set to 'false' stock should be considered In Bond (IB). **Type:** Boolean 'true' or 'false'
minimumQty	States whether the seller has placed a minimum volume of units on the trade. E.g the seller has 50 units on offer with a minimumQty value of 10. **Type:** integer
deliveryPeriod	States whether the lead time on the offer is different to the standard Liv-ex terms of 2 weeks. If deliveryPeriod = 0, the offer is **Special Now** i.e. the stock is n the Liv-ex warehouse, has been checked and is ready for immediate dispatch. **Type:** integer
condition	A free text fied that states any issues with the stock or its packaging. **Type:** string

Some wine offered under a Special contract can match or exceed the Liv-ex SIB terms. Offers listed as 'Special – Now' on the exchange are the equivalent of Standard In Bond (SIB) but have the added benefit of being ready for immediate dispatch from Liv-ex warehouses.