



Outbid and Underoffered PUSH services

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1. Purpose

To provide the API end point information and examples of the web services available for Outbid and Underoffered Notifications PUSH notifications.

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/
Special Now	An offer of stock that is ready for immediate dispatch from Liv-ex warehouses.
Contract Type	Contract type is a generic term for SIB, SEP or Special (X).

3. Technical Standards

- Where relevant, permitted users will be issued with a unique token (CLIENT_KEY) and password (CLIENT_SECRET) combination to control the access for the Liv-ex web services.
- The PUSH service requires a URL from merchants which should be backed by a simple HTTP based POST service capable of accepting and processing JSON/XML payload.
- The PUSH service requires a preceding HTTP 200 - OK response to a heartbeat check to the merchant URL sent by Liv-ex systems via a HEAD request in order to receive the PUSH notification.
- The project will support ISO 8601.
- The project will only support HTTPS protocol for client and server communications.
- Pretty printing for output readability only is supported if required

4. Outbid and Underoffered PUSH notifications

Description

An Outbid or Underoffered Notification PUSH message will be invoked when triggered by specific events on the Liv-ex exchange platform. The information will be sent to a user's system as a PUSH request (XML/JSON payload) to the merchant's URL.

Merchant URL

<merchant_url>

A URL that each merchant should provide to Liv-ex to allow information to be pushed back to their system. The URL should be backed by a HTTP-based PUSH service capable of interpreting an incoming XML/JSON payload. Both HTTP and HTTPS URLs are supported.

Push service requirements - receiving side

The PUSH service is comprised of 2 parts:

1. A HEAD request (to check the merchant system is alive).
2. A POST payload

The service will always send a HEAD request to ping the Merchant URL before sending the PUSH notification. If the Merchant URL fails to respond to the HEAD with HTTP Code 200 OK, the PUSH notification will not be sent.

The Outbid and Underoffer PUSH notification service will attempt to resend each event message a further 4 times at intervals of 15, 60, 180 and 1440 minutes after the first failure. The maximum number of retries is able to be increased, and this would apply to any other PUSH payloads you receive.

HEAD requests will be sent with the following user-agent value:

Mozilla/5.0 (Macintosh; Intel Mac OS X x.y; rv:42.0) Gecko/20100101 Firefox/42.0

PUSH parameters

Notifications largely share the same set of parameters; depending on the type of event being communicated, some or all of the parameters may be populated.

Name	Description
notificationType	The type of notification being received, either "Outbid Notification" or "Underoffer Notification". Type: Alphanumeric
lwin	LWIN18 code Type: Alphanumeric
contractType	Either "SIB", "SEP" or "X" Type: Alphanumeric
price	Type: Integer
quantity	Type: Integer
packSize	Number of bottles in a pack Type: alphanumeric
bottleSize	Size of bottles. E.g. "00750". Type: Alphanumeric

yourBid	For outbid notifications only. Boolean result whether the bid belongs to you or not. Type: Boolean
yourOffer	For underoffer notifications only. Boolean result whether the offer belongs to you or not. Type: Boolean
bestList	For outbid notifications only. Displays the best list price when there is no live offer on the exchange. Always NULL if there is a current live offer on the exchange. Type: Integer
bestBid	For underoffer notifications only. Displays the best bid on the exchange. Type: Integer
lastTradePrice	The last trade price of this wine. Type: Integer
lastTradeDate	The date of last trade. Type: date

4.1 Outbid notification

A new bid has been placed on the exchange that no longer makes you the best or highest bid on the wine, vintage, pack and bottle size.

JSON Outbid notification example

```
{
  "notificationType": "Outbid Notification",
  "apiInfo": {
    "provider": "Liv-ex",
    "timestamp": "2021-12-09T11:40:41.687Z",
    "version": "1.0"
  },
  "outbid": [ {
    "lwin": "110345420131200750",
    "contractType": "SIB",
    "bid": {
      "price": 400.0,
      "quantity": 1,
      "packSize": "12",
      "bottleSize": "00750",
      "yourBid": true
    }
  },
  "bestBid": {
    "price": 450.0,
    "quantity": 1
  },
  "bestOffer": {
    "price": 570.0,
    "quantity": 1
  },
  "bestList": null,
}
```

```
"lastTradePrice" : 580.0,
"lastTradeDate" : "2021-10-22T15:40:43.000+01:00"
}]
}
```

XML Outbid notification example

```
<?xml version="1.0" encoding="UTF-8"?>
<PushResponse>
  <notificationType>Outbid Notification</notificationType>
  <apiInfo>
    <provider>Liv-ex</provider>
    <timestamp>2021-12-07T12:35:53.637Z</timestamp>
    <version>1.0</version>
  </apiInfo>
  <outbid>
    <lwin>111766220160600750</lwin>
    <contractType>SIB</contractType>
    <bid>
      <price>180.0</price>
      <quantity>1</quantity>
      <packSize>06</packSize>
      <bottleSize>00750</bottleSize>
      <yourBid>true</yourBid>
    </bid>
    <bestBid>
      <price>182.0</price>
      <quantity>1</quantity>
    </bestBid>
    <bestOffer>
      <price>260.0</price>
      <quantity>1</quantity>
    </bestOffer>
    <bestList xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:nil="true"/>
    <lastTradePrice>400.0</lastTradePrice>
    <lastTradeDate>2021-11-03T10:33:33.000Z</lastTradeDate>
  </outbid>
</PushResponse>
```

4.2 Underoffered notification

A new offer has been placed on the exchange that no longer makes you the best or lowest offer on the wine, vintage, pack and bottle size.

JSON Underoffer notification example

```
{
  "notificationType" : "Underoffer Notification",
  "apiInfo" : {
    "provider" : "Liv-ex",
    "timestamp" : "2021-12-09T11:40:40.617Z",
```

```

"version" : "1.0"
},
"underOffer" : [ {
  "lwin" : "101322520031200750",
  "contractType" : "SIB",
  "offer" : {
    "price" : 4731.0,
    "quantity" : 1,
    "packSize" : "12",
    "bottleSize" : "00750",
    "yourOffer" : true
  },
  "bestOffer" : {
    "price" : 2514.0,
    "quantity" : 1
  },
  "bestBid" : null,
  "lastTradePrice" : 1788.0,
  "lastTradeDate" : "2016-10-24T08:57:21.000+01:00"
} ]
}

```

XML Underoffer notification example

```

<?xml version="1.0" encoding="UTF-8"?>
<PushResponse>
  <notificationType>Underoffer Notification</notificationType>
  <apiInfo>
    <provider>Liv-ex</provider>
    <timestamp>2021-12-08T09:22:23.512Z</timestamp>
    <version>1.0</version>
  </apiInfo>
  <underOffer>
    <lwin>113479120190600750</lwin>
    <contractType>SIB</contractType>
    <offer>
      <price>2566.0</price>
      <quantity>1</quantity>
      <packSize>06</packSize>
      <bottleSize>00750</bottleSize>
      <yourOffer>true</yourOffer>
    </offer>
    <bestOffer>
      <price>1019.0</price>
      <quantity>1</quantity>
    </bestOffer>
    <bestBid xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:nil="true"/>
    <lastTradePrice>182.0</lastTradePrice>
    <lastTradeDate>2021-08-19T13:14:28.000+01:00</lastTradeDate>
  </underOffer>
</PushResponse>

```

5. Response Codes

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	This is the response to a successful HEAD request which is sent to Merchant's URL before sending a push notification.