



Direct Market Access (DMA): An overview

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About this document

This document is intended as an introduction to the processes involved in Direct Market Access. More detailed technical documentation can be requested by contacting the Liv-ex Data Team (data@liv-ex.com).

About DMA

With DMA, you can allow your customers to buy wines from, or sell wines on, Liv-ex via your own website or systems. It is important to keep in mind that you are responsible for fulfilling the contracts (i.e. payments and deliveries) for everything that your clients buy or sell on Liv-ex.

Please also keep in mind that Liv-ex prices are net prices. We charge a commission of 2% on the trades, plus a fixed settlement fee of £3.50 per case. If the wine you sell is not stored in our warehouse, or you would like to move wine from our warehouse following a purchase, you will also need to factor in your transport cost to or from our Bordeaux or UK warehouse.

For example, if your customer purchases wine from Liv-ex, you will need to collect it from either our UK or Bordeaux warehouse. You might also choose to add some commission for your work.

Below is an example calculation:

Offer price for Wine ABC, 2012, 6x75cl:	1,000 €
Liv-ex commission (2% of offer price):	20 €
Settlement fee (4,90 €/unit):	4.90 €
Total amount payable to Liv-ex:	1,024.90 €
Your commission (example 10%):	102.49 €
Total amount payable by the customer:	1,127.39 €

There are different ways you can communicate the bids and offers to your clients. There good reasons to consider each approach. We leave it to you to decide which works best for your business.

a) Transparent pricing

You show your customers the bids and offers as they appear on Liv-ex, and show the other charges individually. The customers can see the same calculation details as above.

b) All-in pricing

You add up all charges and show your customers the final amount that they would need to pay if buying wine, or would be paid if selling wine.

Buying wine from Liv-ex

This section explains the process of buying wine from Liv-ex using DMA. i.e. your system would need to bid at the offer price of a wine on Liv-ex.

1. Request offer data

Your website or ERP system calls all offers via the *Live Exchange Offers API*. This will return the cheapest SIB (Standard-in-Bond) offers for each wine at LWIN18-specific level from Liv-ex (i.e. wine, vintage, bottle and pack size).

2. Receive offer data

Liv-ex will return a full list with all offers. Below is an example response with description of each data point. The most important ones which your system would need to store as a minimum are highlighted.

3. Additional wine information

If you are happy to display only the wine name and region from point two, you can use the information directly.

It is possible to add further information such as country, colour, appellation and classification to the data. This would make it easier for your customers to filter and search for the wines. You can do this by mapping additional LWIN information from the LWIN database, which is available to download at liv-ex.com/lwin. We can also provide an LWIN API if required.

4. Refresh the data

There are two methods of refreshing the data. The best option for you will depend on how your own systems work.

- a. If you are able to display the data directly on your website or overwrite it easily, you can simply perform a full refresh of all products every 5-10 minutes. Your system will only store the last response from the API. This ensures that all data is up-to-date.
- b. Some ecommerce systems like WooCommerce require each product to be set up before it can be purchased. Replacing thousands of offers with every refresh is very slow and time consuming, even if automated. To get around this, your system can compare the last response against the previous. The purpose of this is to check if the LWIN18 is still available in the same quantity and for the same price. The logic that follows from this comparison is:
 - i. Yes all the same → Do nothing
 - ii. Price or quantity changed → Update the product details on your system
 - iii. LWIN18 disappeared → Remove product from your system
 - iv. New LWIN18 → Add product to your system

5. Display data to your customers:

At this point, you are set up and can display all offers from Liv-ex to your customers. Depending on how you choose to display the prices, you will need to add in some calculations on the front or back end, as shown in the introduction.

6. Customer adds to cart

Checkout systems typically allow customers to add products to a cart. One important consideration is that Liv-ex does not allow any user to block or reserve stock. This means that depending on how long a user spends browsing your website, the wine may be sold before the checkout process is complete. You therefore need to make your customers aware that all data is live and stock is only confirmed after the checkout is complete.

7. User continues to checkout

At this point, there will be an electronic check to make sure that the stock is still available at the desired price and quantity. We have an API that allows you to send the *orderGUID* from point two (above) to Liv-ex. Our system then returns the live information about the product. The most important details that are checked are whether the price and quantity are the same. Detailed information about the order status service is shown in section 5.5 in the DMA documentation.

8. Your system buys the wine from Liv-ex

Your website or ERP places a bid that matches the offer price using the *Add Order Service API* (section 5.2 of DMA documentation). To guarantee availability of stock, some DMA merchants place a bid on the wine before the customer completes check-out.

Once your system has sent the bid to Liv-ex, you have the option of including a reference number (*merchantRef*) in the request. This will be stored against your bid and the trade. If your system generates a unique reference for each purchase order you can use that here. You can also add your individual client ID in here. That reference will be used later to transfer the stock into the sub account of your customer.

Please note that wine can be offered in multiple currencies. Therefore, there might be slight exchange rate fluctuations causing prices to move up or down slightly. If, as a result to the new offer price, your bid is slightly below the offer it won't match. To avoid any issues it would be best to place the bid slightly above the offer (around 1%). However, you would need to calculate that risk into the selling price to your customer.

9. Liv-ex will send a trade confirmation

If everything works as expected, your system will receive a push notification from Liv-ex which confirms the successful trade and also includes the *orderID*, *merchantRef*, trade ID and other information (See section 5.4.1).

Troubleshooting:

1. You receive a bid placed OK (confirmation of bid), but no confirmation of trade push notification

This means the stock is not available anymore. Either the seller removed it or someone else bought it just before you. This very rarely happens as it is a matter of one or two seconds. However, in case it does happen your system would need to send a Delete notification to Liv-ex with the orderID (see “delete order” in the exchange integration document). This removes the bid.

2. You have gone above your buying limit:

If you go over the buying limit of your account, it will not be possible to buy anymore wine from Liv-ex. Please always ensure that your buying limit is high enough. You can use the Account Activity API to check your available credit.

How the purchased wine gets into your clients' accounts

1. Wine was successfully purchased on Liv-ex. What next?

After your customer has purchased the wine, the seller has two weeks to deliver it to London. There we will unpack, photograph (if requested) and check the wine to ensure it is in the advertised condition. This check can take another week.

2. Check updates for your purchase

With the “Trading Activity Service” (section 5.2. [here](#)), you can receive updates on the wine purchased. You can request the data via the `trade_id` or by the `merchantRef`. If the `merchantRef` is your customer's ID, it would make sense to use this.

3. Get UID from CellarView2

Once the wine has been checked and we have received your payment, it is added to your main Vine account. You can see all of your stock using the Cellar View 2 API ([here](#)). You can request the data using the `buyerRef` which is the same as the `merchantRef`. The important number that you will receive as a response from that service is the `uidNumber`. On Liv-ex, every single case of wine gets a unique number to ensure we can track and manage stock accurately and efficiently.

4. Transfer stock to subaccount ([ship/assign API](#))

The wine is now in your overall Vine account, but we would like to add it to your customer's sub-account. This involves the case's unique identifier (UID or `uidNumber`) being moved from your account to your customer's via API. If your customer doesn't already have a sub-account, a new one will be created automatically.

5. Display stock on the customers “cellar”

You can use the CellarView2 feed from step three to display the cellar content for each of your clients. If you do this, your customer could log onto your website to view their holdings. The way that this works is that our system requests the CellarView2 data for that specific subaccount and we return all the data to your website.

Sell wine on Liv-ex

Please be aware that all stock offered on Liv-ex under the SIB contract needs to be in perfect condition.

1. Price adjustments

Selling using DMA works in a similar way to buying using DMA. You will need to consider what prices to show your client, i.e. with or without commission, margin etc. An example of pricing inclusive of commission is shown below.

Price you want to sell Wine ABC, 2012, 6x75cl:	1,000 €
Liv-ex commission (2% of offer price):	20 €
Settlement fee (4,90 €/unit):	4.90 €
Total amount payable to Liv-ex:	1,024.90 €
Your commission (example 10%):	102.49 €
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Alternatively, you can let your client know what they will be charged for selling and allow them to decide on their price. Your customers should be restricted to only selling wine being held in their Vine sub-accounts.

2. User places an offer through DMA

Your system sends the LWIN18, the price and other required information through the Add Order Service API. Similar to the bid, we also return an OK response together with an *orderGUID* that uniquely identifies this position. To identify the exact case of wine your user wants to sell, it would be recommended to add the *UID* for that case in the *merchantRef* field.

3. Amending price or quantity

To amend price or quantity, you need to delete the original offer and then submit a new one. The delete request works with the *orderGUID* which you receive once you have uploaded the offer in step two.

4. Someone buying your wine

You will get a push notification of the successful trade. This includes the *order_guid*, *merchant_ref*, *trade_id* and some other information.

5. Assign UID to the trade

As a last step, your system needs to assign the case to the trade. For this you would need to use the Ship API – assign API ([here](#)). Send the *UID* alongside the *receiverLXtradeNo* = *trade_id* (from step four) through that API to complete the trade.

6. Check payment status

With the “Trading Activity Service” (section 5.2. [here](#)). You can receive updates on the wine you sold and see the exact date when Liv-ex pays you. You can request the data using the *trade_id* or by the *merchantRef*

Manage your buying and selling limits

Liv-ex has a defined buying and selling limit for each merchant which helps us to manage our risk. This means that you can only sell a specified value of wines before sending us the stock, and you can only purchase a certain value before paying us. Managing your limit is important in order to ensure that you can continue to trade all the time.

1. You can see and manage your current headroom (the amount of your limit that remains) through the “Account Status Service (GET Method)” ([here](#)). The fields are called *availableBuyingLimit* and *availableSellingLimit*
2. Once your headroom is gone, your account will be blocked automatically. There are three ways to avoid this:
 - a. **Leave a deposit with Liv-ex**

You can deposit money with us to safeguard for the trade. Your limit is increased by five times the amount the deposit. For example, if you deposit £10,000 to Liv-ex, your limit will increase by £50,000.
 - b. **Pre-pay the trade:**

Once the trade is confirmed, you will be notified via the [Trade Activity API](#), with the total value you need to pay. You can pick up the charge straight from the API and transfer the money into our account. The corresponding “description” tag, which acts as a reference, will also arrive via API.
 - c. **Actively manage your buying headroom:**

In the [Account Status Service API](#) you can see a field called *availableBuyingHeadroom*. That is the total value of wines that you can still buy on Liv-ex. Once this reaches a certain level you can either send a margin (as above) or pre-pay for trade (as above) to increase this headroom again.