

## Streaming Market Data

It is possible to fetch different kinds market data from the TWS:

- **Top Market Data (Level I)**
- **Market Depth (Level II)**
- **5 Second Real Time Bars**

## Live Market Data

In order to receive real time top-of-book, depth-of-book, or historical market data from the API it is necessary have live market data subscriptions for the requested instruments in TWS. The full list of requirements for real time data:

- (1) trading permissions for the specified instruments
- (2) a funded account (except with forex and bonds), and
- (3) market data subscriptions for the specified username

To subscribe to live market data:

Login to your **Account Management** , navigate to Manage Account -> Trade Configuration -> Market Data and select the relevant packages and/or subscription you wish to subscribe to based on the products you require.

One way to determine which market data subscriptions are required for a given security is to enter the contract into a TWS watchlist and the right-click on the contract to select "Launch Market Data Subscription Manager". This will launch a browser window to the market data subscription page of a subscription covering the indicated instrument.

Alternatively, there is also a "Market Data Assistant" utility for determining market data subscriptions:

**Professional Market Data Subscriptions**

We provide real-time streaming market data for the prices described below. Please check the market data subscriptions you wish to receive. All fees listed below are per month. You will have the ability to subscribe or unsubscribe to market data subscriptions after your account has been activated.

To find the exact market data subscription, please click Market Data Assistant button **Market Data Assistant**

	Countries	Price	
<u>IB FOREX (IDEAL PRO)</u>	FOREX	Free	<input checked="" type="checkbox"/>
<u>IB FX</u>	FOREX	Free	<input checked="" type="checkbox"/>
<u>Index CFD (P,L1)</u>	Global	Free	<input checked="" type="checkbox"/>
<u>UK Physical Metals and Commodities (L1)</u>	FOREX	Free	<input checked="" type="checkbox"/>

Be sure to make desired selections on all tabs above before you click Continue.

**Continue**

Once you have selected the relevant packages, click on the "Continue" button and confirm you have made the right choices in the following screen.

**Important:** Market Data subscriptions are billable at the full month's rate and will not be pro-rated.

## Confirm Selection

Here is a summary of the subscription(s) that you have requested. Before we can activate your subscription(s), you must acknowledge any exchange-required market data agreements and disclosures.

Market Data Subscriber Status: Professional

### PENDING SUBSCRIPTIONS:

#### North America

AMEX Equities	23.00 USD
AMEX MKT Order Imbalances	Free
NYSE Global Indices	11.00 USD
NYSE Order Imbalances	Free

### REMOVED SUBSCRIPTIONS:

NYSE Global Indices	11.00 USD
---------------------	-----------

[← Back](#)
[Confirm ✓](#)

## Sharing Market Data Subscriptions

Market data subscriptions are done at a **TWS user name** level, not per account. This implies that live market data subscriptions need to be purchased per every live TWS user. The only exception to this rule are paper trading users. To share the market data subscriptions simply access your [Account Management](#) and navigate to Manage Account -> Settings -> Paper Trading where you will be presented to the screen below. It will take up to 24 hours until the market data sharing takes effect.

## Paper Trading

Your Paper Trading Account is open.

Your username is:

██████████

Your account number is:

██████████

☒ Share real-time market data subscriptions with paper trading account. Note that due to regulatory laws only one of these accounts can have an active session at any given time.

[Apply Change →](#)

**Important:** since your paper trading market data permissions are bound to your live one, you can only obtain live market data on your paper trading user if;

- You have shared the market data subscriptions accordingly as described above.
- You are NOT logged in with your live user name at the same time on a **different** computer.

## Market Data Lines

Whenever a user requests an instrument's real time (top-of-book) market data either from within the TWS or through the TWS API, the user is making use of a market data line. Market data lines therefore represent the **active** market data requests a user has.

**Example:** To clarify this concept further, let us assume a user has a maxTicker Limit of **ten** market data lines and is already observing the real time data of say **five** stocks within the TWS itself. When the user connects his TWS API client application to the TWS, he then requests the real time market data for another **different five** instruments. At a later point while all 10 requests are still active, the user tries to subscribe to the live real time market data of an eleventh product. Since the user is already making use of ten market data lines (five in the TWS and another five in his client application), the TWS will respond with an error message telling the client application it has reached the maximum number of simultaneous requests. In order to request the market data of the eleventh product, the user will have to cancel at least one of the currently active subscriptions (either within TWS or from his client program.)

By default, every user has a maxTicker Limit of 100 market data lines and as such can obtain the real time market data of up to 100 instruments **simultaneously**. This limit however can be further extended either through the purchase of quote booster packs or by increasing the equity and/or commissions of the user's account. For further details on how to increment the number of market data lines or how is your market data lines' entitlement calculated, please refer to our website's "Market Data Display" section within the [Research, News and Market Data](#) page.

**Note:** It is important to understand the concept of market data lines since it has an impact not only on the live real time requests but also for requesting market depth and real time bars.

## Quotes in shares

Previously, US stock size quotes were displayed in round lots (of 100 shares).

Effective with TWS release 985 and above, the bid, ask, and last size quotes are displayed in shares instead of lots.

API users have the option to configure the TWS API to work in compatibility mode for older programs, but we recommend migrating to "quotes in shares" at your earliest convenience.

To use compatibility mode, from the Global Configuration > API > Settings page, check "Bypass US Stocks market data in shares warning for API orders."

