

Pragmatix Trade Router

Version 1.8.0 Release Notes

5 November 2009

Introduction

This document describes the changes and improvements in the Pragmatix Trade Router software with respect to the previous version, 1.7.7.

The Trade Router version number is shown in the application's startup screen. Alternatively, you can see the version number in the Help/About window.

New Features

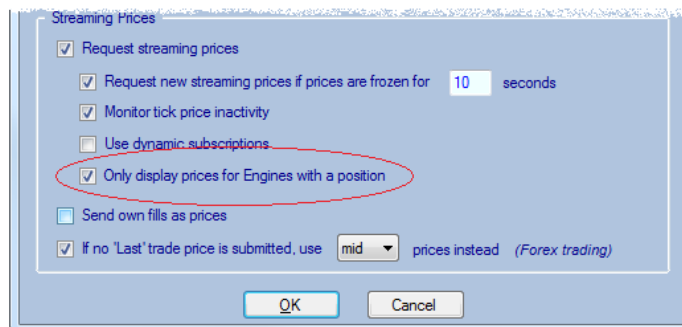
Improvements in profit and loss calculations

Several requests have reached us concerning profit and loss (P&L) calculations, and have led to improvements in the Trade Router.

Only display a price when in a position

When many Trade Engines have been defined, and tick prices are coming in rapidly, then display performance may become an issue (other tick data-related processes, like processing trailing stops and monitoring, only affect performance marginally). In order to reduce processor load, a new feature has been included which specifies that prices should only be shown when the Trade Engine in question has a position.

For Interactive Brokers connections, the option can be accessed via the *Edit Interactive Brokers connection* window:



For other connection types, the connection configuration file¹ can be edited; under the <settings> tag, add a new entry:

```
<add key="OnlyShowPricesIfInPosition" value="yes" />
```

Restart the Trade Router for the change to take effect.

Closed P&L included in 'New Position' message

When the Trade Router enters a new position, a message like the following is normally generated:

```
Engine Microsoft: New position: 3 (average price: 27.15)
```

Many users are monitoring these messages via email or SMS. From a remote location, it is hard to check the P&L of the trades. We therefore have included the closed P&L in the message. For example:

```
Engine Microsoft: New position: 3 (average price: 27.15, closed P&L: 134.90)
```

Note that the closed P&L is the value obtained *after* the trade was executed.

Open P&L not shown in Trade Engine overview if no position

In the Engines window, in the Trade Engine list, the 'Open P&L' for an Engine is shown as blank (instead of '0.00') if the Engine has no position. This means that it's easier to spot the Engines with a position, because only those will have an open P&L showing.

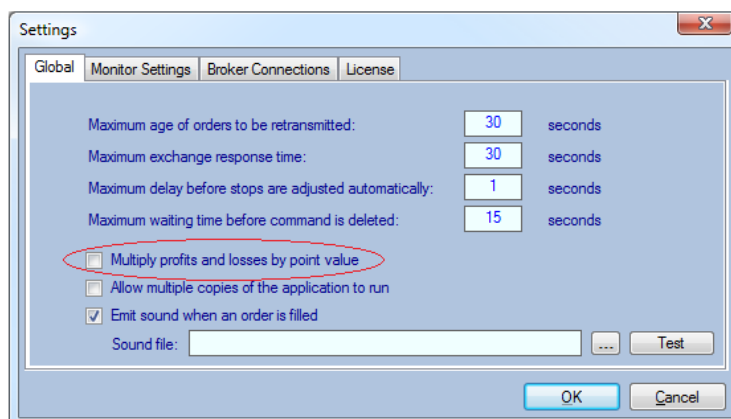
Both Open and Closed P&L calculated with maximal accuracy

The Closed P&L has been rounded to two decimals thus far, which turns out to be inaccurate for some instruments, like currencies. This has been changed; it is now being calculated with the full required accuracy (similar to the Open P&L). The more accurate value is also transmitted to any Front Ends.

New option: multiply Open and Closed P&L with 'big point value'

Instruments like stocks have a point value of 1. This means that a change of 1.00 in value represents a P&L of 1.00 per unit traded. Many instruments, however, have a point value different from 1. The DAX future, for example, has a point value of 25. So, a P&L of 4 points, with a volume of 2, represents an amount of €200.

In order to change the P&L calculation from points into actual amounts, a new application setting is available. Use menu *Configuration/Settings*, tab *Global* to access the setting:



¹ connectFIX.*.config, connectESignal.*.config, and so on

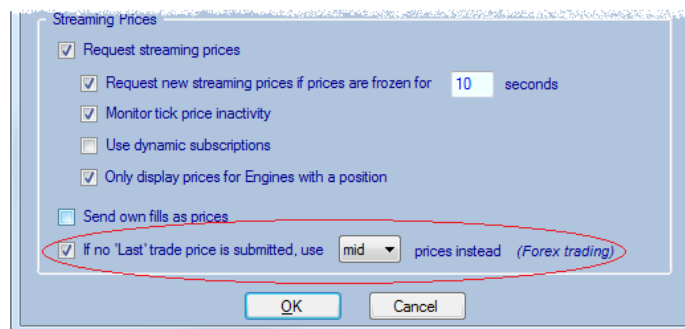
Checking the option will result in the point values to be converted into amounts. The change will take effect immediately.

Please note that the values shown are gross values; they *never* include charges like commissions or other fees.

'Mid' price calculation available for streaming prices

Certain instruments or markets, like spot currency and OTC markets, lack a 'last trade' price in their price streams – only bid and ask are available. In a previous release, an option was added to the system that allows the user to select either bid or ask to replace the 'last trade' price. Now, another option has been added: the average of bid and ask – that is, the 'mid' price.

For Interactive Brokers connections, the option can be set via the *Edit Interactive Brokers connection* window:



For FIX connections, the connectFIX.*.config file can be edited:

```
<add key="AlternativeLastPriceField" value="avg" />
```

Valid values are "bid", "ask" and "avg".

Alternative strategy used when trade prices unavailable

Positions can be built using a 1, 2 or 3-phase strategy. Each phase can use a market, limit or stop order. Market orders don't have a price attached and are filled at once. Stop and limit orders do have a price attached, however, which can either be specified explicitly or be defined as a certain distance from the current market price. For a buy-limit order, the distance is subtracted from the current price. Now, if the current price is unavailable, a value of 0 is used, resulting in a negative price in the order. This is of course undesirable. We therefore have adapted the system:

- In phase 1, if either the resulting order price is ≤ 0 or if the market price is unknown, the limit/stop order is converted into a market order. If this conversion takes place, a system message similar to the following is produced:

```
⚠ 11:00:22 FDAX: Cannot calculate phase 1 price correctly; sending Market order instead.
```

- In the next phases, which can only be reached if the previous phases were using limit or stop orders with a valid price, a new price is calculated as usual; again, the check is made to see if either the resulting order price is ≤ 0 or if the market price is unknown, and if so, the working order from the previous phase remains untouched. If the working order remains untouched, the following system message is produced:

 11:15:12 DAX: Cannot calculate the price for phase 2 correctly; order price will remain unchanged.

This strategy results in orders that can always be processed by the broker. Usually, the 'fault' condition occurs in phase 1, resulting in a position created by a market order.

Frequently-used views now directly available through function keys

The following function keys can now be used in the Trade Router:

- F9: shows Trade Engines in the Engines window;
- F10: shows Price Data Engines in the Engines window;
- F11: opens the Error Log window;
- F12: opens the Detailed Log window.

Engines shown in separate window now available outside main window

A little-known option in the Trade Router is to view a Trade Engine in a separate window. You can open such a window by right-clicking on the Trade Engine in question and selecting 'View in separate window'. In previous releases, the window would open 'inside' the Trade Router window; from now on, it will exist as a separate window. Thus, you can minimize/hide the Trade Router window and still have several Trade Engine windows open.

Better 'sequence number reset' for IG Markets FIX connections

Under rare circumstances, when sequence numbers run out-of-sync, it may be necessary to reset sequence numbers². Now, once the sequence numbers have been reset, the reset will be communicated towards IG Markets upon logon so that their side is aware of such. This will result in an immediate connection.

Please note that resetting sequence numbers may, in theory, result in the loss of information. Only perform this operation if required.

Bug fixes

Open and closed P&L not always updated immediately

In cases where streaming prices are slow or missing, the open and closed P&L were not always updated immediately:

- When the order database was cleaned up;
- When a position was closed.

This has now been corrected.

Trade Router window state saved correctly

When shutting down, the Trade Router now saves the state (size and location) of all windows correctly. In the past, the main window would be off by a bit; this has now been corrected.

² This can be achieved by removing the '.seqnums' file from the FIXAdmin folder in the Trade Router data area. The Trade Router must not be running when the file is removed. Please contact Pragmatix for more details.