S&P Capital IQ Real-Time Solutions

QuantFEED® Developer's Notice

XETRA ULTRA PLUS – Feed Update

Reference n°: 18180 – 21009 - 20140612

Effective as of: 23 June 2014

Action required from users: Attention Required

S&P CAPITAL IQ
McGRAW HILL FINANCIAL

S&P Capital IQ Real-Time Solutions (QuantHouse®) – QuantFEED®
QuantFEED® Developer's Notice
Reference 18180 – 21009 - 20140612
June 12, 2014

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UPDATE OF THE XETRA ULTRA PLUS MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the XETRA ULTRA PLUS market data stream, S&P Capital IQ Real-Time Solutions has decided to enhance the content of QuantFEED®.

This developer's notice contains late-breaking information about the implementation of this modification in your applications, which may not be included otherwise in the published documentation. The topics this notice covers include:

1. Update Summary

Table 1 Current update summary

Notice Reference	18180 – 21009 - 20140612
Exchanges	XETRA ULTRA PLUS
Concerned MICs	XETR
Internal Source ID	44
Effective Date	**2014-06-23**
Impact	• Update of the Quotation Tags
Action required	**Attention Required**

2. Functional Description

Effective Monday, **June 23, 2014**, S&P Capital IQ Real-Time Solutions enhances the content of the quotation data to accommodate the new information disseminated on the XETRA ULTRA PLUS market data stream, as described below:

- 2.1. Changes to the Quotation Data.

2.1. Changes to the Quotation Data

S&P Capital IQ Real-Time Solutions **introduces** the quotation tags below to accommodate the information broadcast on the XETRA ULTRA PLUS market data stream:

Table 2 Quotation tags added on the XETRA ULTRA PLUS market data stream

Tag Name	Numeric ID	Type
`LastAuctionImbalanceSide`	9151	Char
`LastAuctionImbalanceVolume`	9152	Float64
`InternalDailyClosingPriceType`	9155	Char

Below is an example of the current implementation of the newly added (in `green`) quotation tags:

```
InstrumentStatusL1
-- 89/517774
        BID: 96.51      5000    @1
        ASK: 96.57      5000    @1
        LastPrice                       float64{96.711}
        LastTradeQty                    float64{1}
        DailyHighPrice                  float64{96.86}
        DailyLowPrice                   float64{96.64}
        DailyTotalVolumeTraded          float64{12400}
        DailyTotalAssetTraded           float64{1198484.221}
        LastTradePrice                  float64{96.711}
        LastTradeTimestamp              Timestamp{2014-07-12 12:57:44:121}
        InternalDailyOpenTimestamp      Timestamp{2014-07-12 07:04:18:045}
        InternalDailyCloseTimestamp     Timestamp{2014-07-11 15:36:04:008}
        InternalDailyHighTimestamp      Timestamp{2014-07-12 10:13:38:202}
        InternalDailyLowTimestamp       Timestamp{2014-07-12 07:48:52:844}
        InternalPriceActivityTimestamp  Timestamp{2014-07-12 13:08:13:149}
        TradingStatus                   17=ReadyToTrade
        DailyOpeningPrice               float64{96.83}
        PreviousDailyTotalVolumeTraded  float64{12236}
        PreviousDailyTotalAssetTraded   float64{1185827.252}
        PreviousDailyClosingPrice       float64{96.71}
        PreviousBusinessDay             Timestamp{2014-07-11}
        CurrentBusinessDay              Timestamp{2014-07-12}
        LastAuctionPrice                float64{96.83}
        LastAuctionVolume               float64{1}
        LastAuctionImbalanceSide        char{2}
        LastAuctionImbalanceVolume      float64{932}
        InternalDailyClosingPriceType   char{a}
        InternalLastAuctionTimestamp    Timestamp{2014-07-12 07:04:12:882}
        MARKET_XETRA_ULTRA_PLUS_InstrumentStatus        float64{26}
```

3. QuantFEED® Technical Implementation

The following sections describe the technical implementation of the new or updated tags:

- 3.1. LastAuctionImbalanceSide
- 3.2. LastAuctionImbalanceVolume

- 3.3. InternalDailyClosingPriceType.

3.1. LastAuctionImbalanceSide

The values of the quotation tag **LastAuctionImbalanceSide** conveyed on the XETRA ULTRA PLUS market data stream are disseminated via QuantFEED® data stream in *Other Values* to indicate the imbalance side of a closing auction:

- in the callback carrying the Level1 event `notif_TradeEventExt()`, for C++
- in the event handler `TradeEventExtEventHandler`, for C#
- in the callback carrying the Level1 event `quotNotifTradeEventExt`, for Java.

QuantFEED® implementation of the values available for the tag `LastAuctionImbalanceSide` is described below:

Table 3 LastAuctionImbalanceSide – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`LastAuctionImbalanceSide`	QuantFEED® tag name.
Numeric ID	`9151`	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	`Char`	Char data type.
Format	*`[Exchange Specific Value]`*	An ***exchange specific value***, detailing the imbalance side of a closing auction.
Possible Values	`1`	Buy
	`2`	Sell

3.2. LastAuctionImbalanceVolume

The values of the quotation tag **Last Auction Imbalance Volume** conveyed on the XETRA ULTRA PLUS market data stream are disseminated via QuantFEED® data stream in *Other Values* to indicate the imbalance volume of a closing auction:

- in the callback carrying the Level1 event `notif_TradeEventExt()`, for C++
- in the event handler `TradeEventExtEventHandler`, for C#
- in the callback carrying the Level1 event `quotNotifTradeEventExt`, for Java.

QuantFEED® implementation of the values available for the tag `LastAuctionImbalanceVolume` is described below:

Table 4 LastAuctionImbalanceVolume – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`LastAuctionImbalanceVolume`	QuantFEED® tag name.
Numeric ID	`9152`	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	`Float64`	Float64 data type.
Format / Possible Values	*`[Exchange Specific Value]`*	An ***exchange specific value***, detailing the imbalance volume of a closing auction.

3.3. InternalDailyClosingPriceType

The values of the quotation tag **InternalDailyClosingPriceType** conveyed on the XETRA ULTRA PLUS market data stream are disseminated via QuantFEED® data stream in *Other Values* to indicate the type of the internal daily closing price:

- in the callback carrying the Level1 event `notif_TradeEventExt()`, for C++
- in the event handler `TradeEventExtEventHandler`, for C#
- in the callback carrying the Level1 event `quotNotifTradeEventExt`, for Java.

QuantFEED® implementation of the values available for the tag `InternalDailyClosingPriceType` is described in the table below (the values disseminated as of 2014-06-23 are highlighted in `green`):

Table 5 InternalDailyClosingPriceType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`InternalDailyClosingPriceType`	QuantFEED® tag name.
Numeric ID	9155	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	`Char`	Char data type.
Format	*`[Internal Specific Value]`*	An ***internal specific value***, detailing the type of daily closing price, as described below.
Possible Values	0	**Undefined**
	a	**Official Close** – Explicit closing price value calculated and distributed by an exchange for the main trading session of a given trading day.
	b	**Official Indicative** – Exchange has provided an indicative price and marked it as indicative, however no trading activity is observed.
	c	**Official Carry Over** – Explicit Closing price value from a previous trading day carried forward by the exchange to the given trading day.
	d	**Last Price** – Final price disseminated by the exchange for the main trading session or dissemination period of a given trading day (for indices).
	e	**Last Eligible Price** – Execution price of the final trade (subject to trade qualifiers) accepted by the exchange for the main trading session of a given trading day.
	z	**Manual** – Price disseminated manually (in case of production correction).

4. Finding the Latest Information

For the latest documentation and product updates, additional support and training, please contact our support services:

- E-mail: rts-support@spcapitaliq.com
- Web: http://support.quanthouse.com.