

S&P Capital IQ Real-Time Solutions

QuantFEED® Developer's Notice

SGX CASH – Feed Updates

Reference n°: 20140116

Effective as of: **20 January 2014**
 10 February 2014
 24 February 2014

Action required from users: **Attention Required (Optional)**



S&P Capital IQ Real-Time Solutions (QuantHouse®) – QuantFEED®
QuantFEED® Developer's Notice
Reference 20140116
January 16, 2014

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UPDATES OF THE SGX CASH MARKET DATA STREAM

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

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](#)
- [2. Functional Description](#)
- [3. QuantFEED® Technical Implementation](#)
- [4. Finding the Latest Information.](#)

1. Update Summary

Table 1 Current update summary

Notice Reference		20140116
Exchanges		SGX
Concerned MICs		XSES
Internal Source ID		221
UPDATE 1	Effective Date	2014-01-20
	Impact	• Update of the Last Auction Imbalance-related Quotation Tags
UPDATE 2	Effective Date	2014-02-10
	Impact	• Introduction of the Official closing price for ETF instruments
UPDATE 3	Effective Date	2014-02-24
	Impact	• Update of the MARKET_OMNET_OMX_TradingState Quotation Tag
Action required		Attention Required (Optional)

2. Functional Description

Effective Monday, **January 20, 2014**, S&P Capital IQ Real-Time Solutions introduces two new quotations tags – LastAuctionImbalanceSide (**NumericID**: 9151, **Type**: char) and LastAuctionImbalanceVolume (**NumericID**: 9152, **Type**: Float64) – to convey the details of the last auction on SGX CASH market data stream.

Effective Monday, **February 10, 2014**, S&P Capital IQ Real-Time Solutions introduces the Official Closing Price for ETF instruments to accommodate the information disseminated on SGX CASH market data stream.

Effective Monday, **February 24, 2014**, the quotation tag MARKET_OMNET_OMX_TradingState (NumericID: 14800, Type: string) will disseminate two new values: **CIRB** – FIXSecurityTradingStatus_ReadyToTrade and **CIRH** – FIXSecurityTradingStatus_PriceIndication.

3. QuantFEED® Technical Implementation

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

- [3.1. Last Auction Imbalance Side](#)
- [3.2. Last Auction Imbalance Volume](#)
- [3.3. Trading State Name.](#)

3.1. Last Auction Imbalance Side

The values of the quotation tag **Last Auction Imbalance Side** conveyed on the SGX CASH 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 tag `LastAuctionImbalanceSide` is described in the table below:

Table 2 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	<i>[Exchange Specific Value]</i>	An exchange specific value , detailing the imbalance side of a closing auction.
Possible Values	B	Buy-side imbalance
	S	Sell-side imbalance
	N	No imbalance (buy side equals sell side)
	O	Insufficient orders to calculate.

3.2. Last Auction Imbalance Volume

The values of the quotation tag **Last Auction Imbalance Volume** conveyed on the SGX CASH 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 tag `LastAuctionImbalanceVolume` is described in the table below:

Table 3 `LastAuctionImbalanceVolume` – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>LastAuctionImbalanceVolume</code>	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	<i>[Exchange Specific Value]</i>	An exchange specific value , detailing the imbalance volume of a closing auction.

3.3. Trading State Name

Each time a modification of the trading state occurs, the values of the quotation tag **Trading State Name** conveyed on the SGX CASH market data stream are disseminated via S&P Capital IQ Real-Time Solutions's data stream in *Other Values*:

- 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 tag `MARKET_OMNET_OMX_TradingStateName` is described in the table below (newly added values are in **blue**):

Table 4 `MARKET_OMNET_OMX_TradingStateName` – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>MARKET_OMNET_OMX_TradingStateName</code>	QuantFEED® tag name.
Numeric ID	14800	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Type	String	String data type.
Format	<i>[Exchange Specific Value]</i>	An exchange specific value , detailing the current state of the trade.
Possible Values	PRE-OPEN	FIXSecurityTradingStatus_ PreOpen
	PRE-OPEN1	FIXSecurityTradingStatus_ PreOpen
	PRE-OPEN2	FIXSecurityTradingStatus_ PreOpen

Table 4 MARKET_OMNET_OMX_TradingStateName – technical implementation in QuantFEED® (Continued)

Component	Value	Description
Possible Values	NON-CANCEL	FIXSecurityTradingStatus_ TradeDisseminationTime Non-cancellation
	OPEN	FIXSecurityTradingStatus_ ReadyToTrade Open
	PRE-CLOSE	FIXSecurityTradingStatus_ PriceIndication Pre-Closing
	CLOSE	FIXSecurityTradingStatus_ NotAvailableForTrading Close
	CLOSE_MKT	FIXSecurityTradingStatus_ NotAvailableForTrading Closing Market
	CLOSE_	FIXSecurityTradingStatus_ NotAvailableForTrading Close Signal Collect
	DL	FIXSecurityTradingStatus_ NotAvailableForTrading Delisted
	SUSP	FIXSecurityTradingStatus_ TradingHalt Suspended
	ADJUST	FIXSecurityTradingStatus_ PriceIndication Adjusting
	BI	FIXSecurityTradingStatus_ NotAvailableForTrading Trading restricted to Buying-In market only
	BI_OPEN	FIXSecurityTradingStatus_ ReadyToTrade Buying-In Opening
	CIRB	FIXSecurityTradingStatus_ ReadyToTrade Triggered by the trading engine whenever an order would trade outside of the upper and lower circuit breaker limits for stocks under Circuit Breaker monitoring.
	CIRH	FIXSecurityTradingStatus_ PriceIndication Halt due to Circuit Breaker Triggered
	H	FIXSecurityTradingStatus_ PriceIndication Trading Halt
	J	FIXSecurityTradingStatus_ PriceIndication Instrument Session State Adjust
	MCE	FIXSecurityTradingStatus_ PriceIndication Mandatory Call Event has occurred for Callable Bull/ Bear Contracts (CBBC).
	PL	FIXSecurityTradingStatus_ NotAvailableForTrading Pending Listing
	_PRV_CLOSE	FIXSecurityTradingStatus_ ReadyToTrade Previous Close
	_PRV_OPEN	FIXSecurityTradingStatus_ ReadyToTrade Previous Open

Below is an example of the current implementation of the newly added (in **green**) or updated (in **blue**) quotation tags :

```
InstrumentStatusL1
-- 226/1009211
    BID: 0.058      115000
    ASK: 0.059      11846000
    LastPrice                float64{0.058}
    LastTradeQty             float64{55000}
    DailyHighPrice           float64{0.059}
    DailyLowPrice            float64{0.057}
    DailyTotalVolumeTraded   float64{27180000}
    DailyTotalAssetTraded    float64{1588030}
    LastTradePrice           float64{0.058}
    LastTradeTimestamp       Timestamp{2014-01-02 09:04:53:018}
    InternalDailyOpenTimestamp Timestamp{2014-01-02 00:58:37:065}
    InternalDailyCloseTimestamp Timestamp{2014-01-02 09:06:00:025}
    InternalDailyHighTimestamp Timestamp{2014-01-02 00:58:37:065}
    InternalDailyLowTimestamp Timestamp{2014-01-02 08:59:13:027}
    InternalPriceActivityTimestamp Timestamp{2014-01-02 09:06:00:025}
    TradingStatus            18=NotAvailableForTrading
    LastOffBookTradePrice    float64{0}
    LastOffBookTradeQty      float64{1500000}
    LastOffBookTradeTimestamp Timestamp{2013-11-07 08:44:08:345}
    DailyOpeningPrice        float64{0.059}
    DailyClosingPrice        float64{0.058}
    PreviousDailyTotalVolumeTraded float64{21495000}
    PreviousDailyTotalAssetTraded float64{1248916}
    PreviousDailyClosingPrice float64{0.058}
    PreviousBusinessDay      Timestamp{2013-12-31}
    CurrentBusinessDay       Timestamp{2014-01-02}
    LastAuctionPrice         float64{0.058}
    LastAuctionVolume        float64{1405000}
    DailyTotalOffBookVolumeTraded float64{0}
    DailyTotalOffBookAssetTraded float64{0}
    LastAuctionImbalanceSide  char{B}
    LastAuctionImbalanceVolume float64{115000}
    InternalLastAuctionTimestamp Timestamp{2014-01-02 09:04:07:396}
    PriceActivityMarketTimestamp Timestamp{2014-01-02 09:06:00:003}
    MARKET_OMNET_OMX_TradingStateName string{CLOSE_}
```

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>.