QuantFEED® Developer's Notice

NGM – Feed Update

Reference n°: 20141009 – 21467 – 23148 (Update 01 to 20140910 – 21467 – 21469)

Effective as of: 20 October 2014[*]

Action required from users: Attention Required

S&P CAPITAL IQ

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[*]   This is the proposed day for the update of the standard version of the feed handler. For dedicated feed handlers, this date may differ. For the actual day when the changes to your custom feed handler take effect, please contact your QuantFEED® project manager.

S&P Capital IQ Real-Time Solutions (QuantHouse®) – QuantFEED®
QuantFEED® Developer's Notice
Reference 20141009 – 21467 – 23148
October 09, 2014

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UPDATE OF THE NGM MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the NGM 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
- 2. QuantFEED® Technical Implementation
- 3. Finding the Latest Information.

1. Update Summary

Table 1   Current update summary

Notice Reference	20141009 – 21467 – 23148[i] (Update 01 to 20140910 – 21467 – 21469)
Exchanges	NGM
Concerned MICs	XNGM, NMTF
Internal Source ID	198
Effective Date	**2014-10-20**[*]
Impact	• Update of the Referential • Update of the Quotation Tags • Update of the Quotation Context Tags
Action required	**Attention Required**

i. *The red bars in the left margin highlight content that has been added or changed since the previous release of this document.*

2. QuantFEED® Technical Implementation

Effective Monday, **October 20**[*]**, 2014**, S&P Capital IQ Real-Time Solutions enhances the quotation data to accommodate the new information disseminated on the NGM market data stream, as described below:

2.1. Changes to the Referential Data

S&P Capital IQ Real-Time Solutions **introduces** the referential tags below to accommodate the information disseminated on the NGM market data stream:

Table 2   Referential tags added on the NGM market data stream

Tag Name	Numeric ID	Type
MinTradeVol	562	Float64

S&P Capital IQ Real-Time Solutions also **removes** the referential tags below:

Table 3   Referential tags no longer disseminated on the NGM market data stream

Tag Name	Numeric ID	Type
ForeignFOSMarketId	9501	UInt16
ForeignMarketId	9502	String

2.1.1. MinTradeVol

The values of the referential tag **MinTradeVol** conveyed on the NGM market data stream are disseminated via QuantFEED® data stream in *Referential* to specify the minimum traded volume.

QuantFEED® implementation of the tag MinTradeVol is detailed in the table below:

Table 4   MinTradeVol – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MinTradeVol	QuantFEED® tag name.
Numeric ID	562	QuantFEED® unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	Float64	String data type.
Format / Possible Values	*[Exchange Specific Value]*	An **exchange specific value**, specifying the minimum traded volume.

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Referential Data Sample

Below is an example showing the current implementation of the newly added (in green) and removed (in ~~crossed out red~~) referential tags:

```
instr # 252/30020 = 528512324
    PriceCurrency              string{SEK}
    Symbol                     string{ASTG MTF}
    Description                string{ADVANCED STABILIZED TECHNOLOGIES GROUP}
    SecurityType               string{CS}
    FOSMarketId                XNGM
    PriceType                  uint8{2}
    CFICode                    string{ESXXXX}
    RoundLot                   float64{1}
    MinTradeVol                float64{1}
    MarketSegmentID            string{MST}
    InternalCreationDate       Timestamp{2014-03-26 00:00:00:118}
    InternalModificationDate   Timestamp{2014-11-28 03:30:00:532}
    InternalSourceId           uint16{198}
    InternalAggregationId      uint16{198}
    LocalCodeStr               string{1XFE}
    ForeignFOSMarketId         XSTO
    ForeignMarketId            string{XSTO}
    ISIN                       string{SE0005676277}
    PriceIncrement_dynamic_TableId  uint32{12976229}
    OperatingMIC               string{XNGM}
    SegmentMIC                 string{NMTF}
```

2.2. Changes to the Quotation Data

S&P Capital IQ Real-Time Solutions **updates** the quotation tags below to accommodate the information disseminated on the NGM market data stream:

Table 5   Quotation tags disseminating updated values on the NGM market data stream

Tag Name	Numeric ID	Type
MARKET_NGM_KnockOutBuyback	15040	Char

2.2.1. MARKET_NGM_KnockOutBuyback

The values of the quotation tag **MARKET_NGM_KnockOutBuyback** conveyed on the NGM market data stream are disseminated via QuantFEED® data stream in *Other Values* to detail the type of buyback for a knock-out product:

- 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_NGM_KnockOutBuyback` is described in the table below (existing values are in `black`, newly added values are in green):

Table 6   **MARKET_NGM_KnockOutBuyback – technical implementation in QuantFEED®**

Component	Value	Description
Tag Name	`MARKET_NGM_KnockOutBuyback`	QuantFEED® tag name.
Numeric ID	15040	QuantFEED® unique ID disseminated on the 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 particular condition applicable to the trade.
Possible Values	U	Sold-out buyback
	V	Distribution
	W	Knock out
	X	Knock out buyback
	Y	Knock out soft
	Z	Under observation

Quotation Data Sample

Below is an example showing the current implementation of the updated (in blue) quotation tags:

```
InstrumentStatusL1
-- 252/30020
        BID: 0.99       10102    @1
        ASK: 1.04       9616     @1
        LastPrice                   float64{1.02}
        LastTradeQty                float64{99886}
        DailyHighPrice              float64{1.04}
        DailyLowPrice               float64{0.99}
        DailyTotalVolumeTraded      float64{167800}
        DailyTotalAssetTraded       float64{171315}
        LastTradePrice              float64{1.02}
        LastTradeTimestamp          Timestamp{2014-11-28 16:29:26:247}
        InternalDailyOpenTimestamp  Timestamp{2014-11-28 08:00:00:445}
        InternalDailyCloseTimestamp Timestamp{2014-11-28 17:00:00:585}
        InternalDailyHighTimestamp  Timestamp{2014-11-28 11:35:39:446}
        InternalDailyLowTimestamp   Timestamp{2014-11-28 08:45:44:496}
        InternalPriceActivityTimestamp  Timestamp{2014-11-28 17:00:00:585}
        TradingStatus               18=NotAvailableForTrading
        SessionVWAPPrice            float64{0}
        DailyOpeningPrice           float64{1.03}
        DailyClosingPrice           float64{1.02}
        PreviousDailyTotalVolumeTraded  float64{54624}
        PreviousDailyTotalAssetTraded   float64{55880.08}
        PreviousDailyClosingPrice   float64{1.02}
        PreviousBusinessDay         Timestamp{2014-11-27}
        CurrentBusinessDay          Timestamp{2014-11-28}
        PriceActivityMarketTimestamp    Timestamp{2014-11-28 17:00:00:582}
        InternalDailyBusinessDayTimestamp  Timestamp{2014-03-28 08:00:00:445}
        MARKET_NGM_KnockOutBuyback       char{U}
```

2.3. Changes to the Quotation Context Data

S&P Capital IQ Real-Time Solutions **updates** the quotation context tags below to accommodate the information disseminated on the NGM market data stream:

Table 7   Quotation context tags disseminating updated values on the NGM market data stream

Tag Name	Numeric ID	Type
TradeCondition	277	String

2.3.1. TradeCondition

Each time a trade occurs, the values of the quotation tag **TradeCondition** conveyed on the NGM market data stream are disseminated via QuantFEED® data stream in *Context*:

- 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 `TradeCondition` is described in the table below:

Table 8   TradeCondition – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	TradeCondition	QuantFEED® tag name.
Numeric ID	277	QuantFEED® unique ID broadcast on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	String	String data type.
Format	*[Exchange Specific Value]*	An **exchange specific value**, detailing the conditions of a trade.
Possible Values	I	Sold last (late reporting)
	AV	Outside spread
	X0	Outside spread unknown
	XB	Knock out buyback trade
	XD	Distribution trade
	XS	Sold out buyback trade

Quotation Context Data Sample

Below is an example showing the current implementation of the updated (in blue) quotation context tags:

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"
"VU (ValuesUpdate) : SERVER_TIME INSTRUMENT VALUES..."
"SI (TradeEvent) *SIGNAL* : SERVER_TIME INSTRUMENT SIGNAL LAST_PRICE"

VU  06:39:59:114.695  252/30020  TradingStatus=17
TE  06:39:59:114.695  252/30020 0.99   1.04      0.99   10102@1   0.89    9616@1    L
TradeCondition=XB,TradeID=14
```

3. 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.