QuantFEED® Developer's Notice

TURQUOISE MIT – Feed Update

Reference n°: 20131128

Effective as of: 02 December 2013

Action required from users: Attention Required (Optional)



S&P Capital IQ's Real-Time Solutions (QuantHouse*) – QuantFEED* QuantFEED* Developer's Notice Reference 20131128 November 28, 2013

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UPDATE OF TURQUOISE MIT MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on TURQUOISE MIT market data stream, S&P Capital IQ's 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. Functional Description
- 3. QuantFEED® Technical Implementation
- 4. Finding the Latest Information.

1. Update Summary

Table 1 Current update summary

Notice Reference	20131128
Exchanges	TURQUOISE MIT
Concerned MICs	TRQX
Internal Source ID	19
Effective Date	2013-12-02
Impact	 Update of the Referential Tags Update of the Quotation Tags Update of the Quotation Context Tags
Action required	Attention Required (Optional)

2. Functional Description

Effective Monday, **December 02, 2013**, S&P Capital IQ's Real-Time Solutions introduces a new referential tag — OperatingMIC (**NumericID**: 9533, **Type**: String) — to reflect TURQUOISE MIT's adoption of the ISO 10383:2013 standard.

Moreover, the values currently disseminated by the referential tag MarketSegmentID (NumericID: 1300, Type: String) will be replaced.

Also, the quotation tags TradingStatus (NumericID: 9100, Type: Enum), MARKET_TURQUOISE_DarkBookTradingStatus (NumericID: 14721, Type: Enum), MARKET_TURQUOISE_OffBookReportingTradingStatus (NumericID: 14722, Type: Enum) will disseminate a new value — 5 - Price Indication.

Furthermore, S&P Capital IQ's Real-Time Solutions introduces the quotation context tag AggressorSide (**NumericID**: 9356, **Type**: Char) to accommodate the information disseminated on TURQUOISE MIT market data stream.

3. QuantFEED® Technical Implementation

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

- 3.1. Operating MIC
- 3.2. Market Segment ID
- 3.3. Trading Status
- 3.4. Dark Book Trading Status
- 3.5. Off Book Reporting Trading Status
- 3.6. Aggressor Side.

3.1. Operating MIC

The values of the referential tag **Operating MIC** conveyed on the TURQUOISE MIT market data stream are disseminated via QuantFEED*'s data stream in *Referential* to specify the parent MIC.

QuantFEED*'s implementation of the values currently available for the tag OperatingMIC is described in the table below:

Table 2 OperatingMIC – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	OperatingMIC	QuantFEED® tag name.
Numeric ID	9533	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	String	String data type.
Format	[Exchange Specific Value]	An exchange specific value , specifying the parent MIC.
Possible Values	TRQX	Parent MIC for all TURQUOISE MIT's branches.

3.2. Market Segment ID

The values of the referential tag **Market Segment ID** conveyed on the TURQUOISE MIT market data stream are disseminated via QuantFEED*s data stream in *Referential* to specify the ID of the market segment.

 $Quant FEED \ensuremath{\mbox{\tt of the values currently available for the tag MarketSegmentID} is described in the table below:$

Table 3 MarketSegmentID – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MarketSegmentID	QuantFEED® tag name.
Numeric ID	1300	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	String	String data type.
Format	[Exchange Specific Value]	An exchange specific value , detailing the ID of the market segment.
	Values Before 2013-12-02	Values After 2013-12-02
	WBAH	AT
	XBRU	ВЕ
	XSWX	СН
	XVTX	СН
	XPRA	CZ
	XETR	DE
	XCSE	DK
	XLON	EB
	XLUX	EB
	XMCE	ES
	XHEL	FI
Possible Values	XAMS	FR
rossible values	XPAR	FR
	XLON	GB
	XBUD	HU
	XDUB	IE
	МТАА	IT
	XAMS	NL
	XOSL	NO
	XLIS	PT
	XST0	SE
	ARCX	US
	XNGS	US
	XNMS	US
	XNYS	US

Below is an example of the current implementation of the newly added and updated referential tags:

```
instr # 428/4352 = 897585408
   PriceCurrency
                              string{SEK}
                              string{CAST}
   Symbol
                              string{Castellum AB}
   Description
   MaxFloor
                              float64{2154150}
   SecurityType
                              string{CS}
   FOSMarketId
                             TRQX
   CFICode
                              string{ESXXXX}
                           string{EQ}
   SecuritySubType
   MarketSegmentID
                            string{SE}
   InternalCreationDate Timestamp{2013-11-22 09:52:11:142}
   InternalModificationDate Timestamp{2013-11-22 09:52:11:142}
   InternalSourceId
                              uint16{22}
   LocalCodeStr
                              string{CASTs}
   ForeignFOSMarketId
                              XST0
   ForeignMarketId
                              string{XSTO}
                              string{SE0000379190}
   TSTN
   PriceIncrement_dynamic_TableId
                                     uint32{0}
   UMTF
                           string{CASTs}
   OperatingMIC
                              string{TRQX}
   MARKET_TURQUOISE_Ticker string{CASTs}
```

3.3. Trading Status

Each time a modification of the trading status occurs, the values of the quotation tag **Trading Status** conveyed on the TURQUOISE MIT market data stream are disseminated via QuantFEED*'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 Levell event quotNotifTradeEventExt, for Java.

QuantFEED*'s implementation of the tag TradingStatus is described in the following table (newly added values are in green):

Table 4 TradingStatus – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	TradingStatus	QuantFEED® tag name.
Numeric ID	9100	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Enum	Enum data type.
Format	[Exchange Specific Value]	An exchange specific value , detailing the characteristics of the trading status.
	2	Trading Halt
Possible Values	5	Price Indication
	17	Ready to Trade
	18	Not Available for Trading

3.4. Dark Book Trading Status

The values of the quotation tag **Dark Book Trading Status** conveyed on the TURQUOISE MIT market data stream are disseminated via QuantFEED*s data stream in *Other Values* to indicate the trading status:

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

QuantFEED* implementation of the tag MARKET_TURQUOISE_DarkBookTradingStatus is described in the table below (newly added values are in green):

Table 5 MARKET_TURQUOISE_DarkBookTradingStatus - technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_TURQUOISE_DarkBookTradingStatus	QuantFEED® tag name.
Numeric ID	14721	QuantFEED® unique ID broadcast on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Enum	Enum data type.
Format	[Exchange Specific Value]	An exchange specific value , indicating the trading status of the Dark Book.
	2	Trading Halt
Possible Values	5	Price Indication
	17	Ready to Trade
	18	Not Available for Trading

3.5. Off Book Reporting Trading Status

Each time a trade occurs, the values of the quotation tag **Off Book Reporting Trading Status** conveyed on the TURQUOISE MIT market data stream are disseminated via QuantFEED*'s data stream in *Other Values* to indicate the off book trading status:

- 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_TURQUOISE_OffBookReportingTradingStatus is described in the table below (newly added values are in green):

 ${\bf Table~6} \qquad {\bf MARKET_TURQUOISE_OffBookReportingTradingStatus-technical~implementation~in~QuantFEED @ Constant of the control of the cont$

Component	Value	Description
Tag Name	MARKET_TURQUOISE_OffBookReporting TradingStatus	QuantFEED® tag name.
Numeric ID	14722	QuantFEED® unique ID broadcast on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Enum	Enum data type.
Format	[Exchange Specific Value]	An exchange specific value , indicating the off book trading status.

Table 6 MARKET_TURQUOISE_OffBookReportingTradingStatus – technical implementation in QuantFEED®

Component	Value	Description
Possible Values	2	Trading Halt
	5	Price Indication
	17	Ready to Trade
	18	Not Available for Trading

3.6. Aggressor Side

Each time a trade occurs, the values of the quotation context tag **Aggressor Side** conveyed on the TURQUOISE MIT market data stream are disseminated via QuantFEED*'s data stream in *Context*, to indicate whether the aggressor is a buyer or a seller:

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

QuantFEED*'s implementation of the values currently available for the tag AggressorSide is described in the following table:

Table 7 AggressorSide – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	AggressorSide	QuantFEED® tag name.
Numeric ID	9356	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Char	Char data type.
Format	[Exchange Specific Value]	An exchange specific value , indicating whether the aggressor is a buyer or a seller.
	Space	No aggressor
Possible Values	1	Buy Side
	2	Seller Side

Below is an example of the current implementation of the newly added or updated quotation context tags:

4. Finding the Latest Information

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

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