

S&P Capital IQ's Real-Time Solutions

QuantFEED® Feed Description

TMX Feed

Reference n°: 20130702



S&P Capital IQ's Real-Time Solutions (QuantHouse®) – QuantFEED®
QuantFEED® Feed Description
Reference 20130702
July 02, 2013

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QUANTFEED® TMX FEED DESCRIPTION

As part of S&P Capital IQ's Real-Time Solutions's QuantFEED® documentation, this feed description provides you with details about the types of data broadcast on the TMX market data stream, their possible values and current QuantFEED® technical implementation.

The topics this feed description covers include:

- [1. Referential Data](#)
- [2. Quotation Data](#)
- [3. Official Closing Price](#)
- [4. Finding the Latest Information.](#)

1. Referential Data

The following sections describe the characteristics of the referential data on TMX market data stream, in terms of:

- [1.1. Available Markets and Branches](#)
- [1.2. Types of Instruments.](#)

1.1. Available Markets and Branches

This section details the list of markets and branches available on TMX market data stream:

- [1.1.1. Markets](#)
- [1.1.2. Branches.](#)

1.1.1. Markets

The TMX market data stream broadcasts informations about the following markets:

Table 1 List of markets available on TMX market data stream

QuantFEED® Market ID	Market
XTSE	Toronto Stock Exchange
XTSX	TSX Venture Exchange

The following example shows the list of markets available on TMX market data stream and their IDs, returned by the command dumps:

```
MARKETS
market # 48      CC=CA/CANADA/TORONTO,DESCR=TORONTO STOCK EXCHANGE,WEB=www.tse.com
  MIC = XTSE
  TimeZone = America/Toronto
  Country = CA
  NbMaxInstruments = 2000000
market # 49      CC=CA/CANADA/TORONTO,DESCR=TSX VENTURE EXCHANGE,WEB=www.tsx.com
  MIC = XTSX
  TimeZone = America/Toronto
  Country = CA
  NbMaxInstruments = 2000000
```

1.1.2. Branches

The example below shows the list of branches available on TMX market data stream, returned by the command dumps. Each branch displays the following details: FOSMarketID, SecurityType, CFICode and Quantity (of instruments):

```
BRANCHES
{ XTSE CS  EXXXXX } qty: 2414
{ XTSX CS  EXXXXX } qty: 2482
```

1.2. Types of Instruments

The following sections illustrate the instruments' characteristics on TMX market data stream, according to their type:

- [1.2.1. Equities.](#)

1.2.1. Equities

The sample below illustrates the details of an equity:

```
instr # 48/3472 = 100666768
  PriceCurrency      string{CAD}
  Symbol             string{WPT}
  SecurityType       string{CS}
  FOSMarketId        XTSE
  CFICode            string{EXXXXX}
  RoundLot           float64{100}
  SecurityGroup       string{27}
  InternalCreationDate Timestamp{2013-02-23 09:28:13:214}
  InternalModificationDate Timestamp{2013-02-23 09:28:13:214}
  InternalSourceId    uint16{207}
  LocalCodeStr       string{WPT}
  CUSIP              string{960908309}
```

2. Quotation Data

The following sections describe the characteristics of the quotation data on TMX market data stream, in terms of:

- [2.1. Quotation Values](#)
- [2.2. Trading Status](#)
- [2.3. Specific Quotation Tags.](#)

2.1. Quotation Values

The examples below shows the possible values of an instrument on TMX market data stream:

```
InstrumentStatusL1
-- 48/3472
    BID: 35.12      0      *NO ORDER*
    ASK: 35.48      0      *NO ORDER*
    LastPrice                float64{35.45}
    LastTradeQty              float64{100}
    DailyHighPrice            float64{36.14}
    DailyLowPrice             float64{34.38}
    DailyTotalVolumeTraded    float64{83031}
    DailyTotalAssetTraded     float64{2918103.2}
    LastTradePrice            float64{35.45}
    LastTradeTimestamp        Timestamp{2013-06-28 20:00:00:080}
    InternalDailyOpenTimestamp Timestamp{2013-06-28 13:30:00:079}
    InternalDailyCloseTimestamp Timestamp{2013-06-28 21:00:00:058}
    InternalDailyHighTimestamp Timestamp{2013-06-28 13:50:59:910}
    InternalDailyLowTimestamp  Timestamp{2013-06-28 16:35:15:422}
    InternalPriceActivityTimestamp Timestamp{2013-07-01 06:20:00:137}
    TradingStatus              18=NotAvailableForTrading
    DailyOpeningPrice          float64{34.87}
    DailyClosingPrice          float64{35.45}
    PreviousDailyTotalVolumeTraded float64{110454}
    PreviousDailyTotalAssetTraded float64{3776465.43}
    PreviousDailyClosingPrice   float64{34.77}
    PreviousBusinessDay         Timestamp{2013-06-27}
    CurrentBusinessDay          Timestamp{2013-06-28}
    InternalLastAuctionTimestamp Timestamp{2013-06-28 13:29:54:147}
    MARKET_QUANTUM_GroupStatus  char{F}
```

For more details about the fields and tags available in quotation data type, and their possible values, see *FeedOS™ Quotation Tags Guide*.

2.2. Trading Status

Each time a modification of the trading status occurs, the values of the quotation tag **Trading Status** conveyed on the TMX 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 Level1 event `quotNotifTradeEventExt`, for Java.

QuantFEED®'s implementation of the tag TradingStatus is described in the following table:

Table 2 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.
Type	Enum	Enum data type.
Format	<i>[Exchange Specific Value]</i>	An exchange specific value , detailing the characteristics of the trading status.
Possible Values	2	Trading Halt
	5	Price Indication
	17	Ready to Trade
	18	Not Available for Trading
	21	Pre-Open

2.3. Specific Quotation Tags

The following sections describe additional, specific quotation tags available on TMX market data stream:

- [2.3.1. Trade Conditions](#)
- [2.3.2. Other Values.](#)

2.3.1. Trade Conditions

The following subsections describe the trade conditions on TMX market data stream:

- [2.3.1.1. Cross Type.](#)

2.3.1.1. Cross Type

The values of the quotation tag **Cross Type** conveyed on the TMX market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Context* to detail the type of crosses originating from a Participating Organization between managed accounts that have the same manager:

- 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_TMX_CrossType` is described in the table below:

Table 3 `MARKET_TMX_CrossType` – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>MARKET_TMX_CrossType</code>	QuantFEED® tag name.
Numeric ID	16170	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.
Type	Char	Char data type.
Format	<i>[Exchange specific value]</i>	An exchange specific value , detailing the type of crosses originating from a Participating Organization between managed accounts that have the same manager.
Possible Values	[Empty]	Default value, not sent.
	I	Internal
	B	Basis
	C	Contingent (TSX Only)
	S	Special Trading session (TSX Only)
	V	VWAP – Volume Weighted Average

2.3.2. Other Values

The subsections below detail the other values available on TMX market data stream:

- [2.3.2.1. Stock State](#)
- [2.3.2.2. Group Status.](#)

2.3.2.1. Stock State

Each time a modification of the state of an instrument occurs, the values of the quotation tag **Stock State** conveyed on the TMX market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Other Values* to indicate the current status of the stock:

- 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_QUANTUM_StockState` is described in the table below:

Table 4 `MARKET_QUANTUM_StockState` – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>MARKET_QUANTUM_StockState</code>	QuantFEED® tag name.
Numeric ID	15020	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.
Type	String	String data type.
Format	<i>[Exchange specific value]</i>	An exchange specific value , indicating the current state of the stock.

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

Component	Value	Description	
Possible Values	<empty> / not sent	—	The instrument features the same characteristics as the group to which it belongs, as detailed by the tag Group Status .
	AR	FIXSecurityTradingStatus_ PreOpen	Authorized Delayed – Stock is delayed at the opening and order entry is allowed.
	IR	FIXSecurityTradingStatus_ NotAvailableForTrading	Inhibited Delayed – Stock is delayed, order entry by PO/ Vendor is not allowed.
	AS	FIXSecurityTradingStatus_ PriceIndication	Authorized Halted – Stock is halted and order entry is allowed.
	IS	FIXSecurityTradingStatus_ TradingHalt	Inhibited Halted – Stock is halted and order entry by PO/Vendor is not allowed.
	AG	FIXSecurityTradingStatus_ TradingHalt	Authorized Frozen – Stock is frozen and order entry is allowed once the freeze is released.
	IG	FIXSecurityTradingStatus_ TradingHalt	Inhibited Frozen – Stock is frozen and order entry by PO/Vendor is not allowed once the freeze is released.
	AE	FIXSecurityTradingStatus_ ReadyToTrade	Authorized price movement delayed – Stock is delayed at the closing, moves into the price movement extension market state where limit on close order entry is allowed.
	AF	FIXSecurityTradingStatus_ NotAvailableForTrading	Authorized price movement frozen – Stock is authorized frozen at the closing, moves into price movement extension market state and no order entry is allowed.
	IE	FIXSecurityTradingStatus_ NotAvailableForTrading	Inhibited price movement delayed – Stock is delayed at the closing, moves into the price movement extension market state and no order entry is allowed by PO/ Vendor.
	IF	FIXSecurityTradingStatus_ NotAvailableForTrading	Inhibited price movement frozen – Stock is inhibited frozen at the closing, moves into price movement extension market state and no order entry is allowed by PO/Vendor.
	A	Current FIXSecurityTradingStatus of the Group.	Authorized – Order entry allowed if the market state permits.
	I	FIXSecurityTradingStatus_ NotAvailableForTrading	Inhibited – No order entry allowed by PO/Vendor.

2.3.2.2. Group Status

Each time a modification of a group of instruments occurs, the values of the quotation tag **Group Status** conveyed on the TMX market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Other Values* to indicate the current status of the group:

- 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_QUANTUM_GroupStatus` is described in the table below:

Table 5 `MARKET_QUANTUM_GroupStatus` – technical implementation in QuantFEED®

Component	Value	Description	
Tag Name	<code>MARKET_QUANTUM_GroupStatus</code>	QuantFEED® tag name.	
Numeric ID	15021	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.	
Type	Char	Char data type.	
Format	<i>[Exchange Specific Value]</i>	An exchange specific value , detailing the condition of halting an instrument, as described below.	
Possible Values	C	FIXSecurityTradingStatus_ NotAvailableForTrading	Closed – No market function available.
	P	FIXSecurityTradingStatus_ PreOpen	Pre Open – Order entry only.
	O	FIXSecurityTradingStatus_ PreOpen	Opening – Opening rotation/ opening auction – no order entry allowed.
	S	FIXSecurityTradingStatus_ ReadyToTrade	Open – Order entry, crosses and continuous trading allowed.
	M	FIXSecurityTradingStatus_ PriceIndication	MOC Imbalance – Allows orders to be enter for MOC to offset imbalance only.
	A	FIXSecurityTradingStatus_ PriceIndication	CCP Determination – Calculating Closing Price. No order entry allowed.
	E	FIXSecurityTradingStatus_ PriceIndication	Price Movement Extension – Allows MOC limit orders if symbol does not have a CCP.
	L	FIXSecurityTradingStatus_ PriceIndication	Closing – CLOB and MOC orders participate in closing auction.
	N	FIXSecurityTradingStatus_ PriceIndication	Extended Hours CXL – Orders in the book can be cancelled.
	R	FIXSecurityTradingStatus_ PriceIndication	Extended Hours Open – Trading at the closing price permitted.
	F	FIXSecurityTradingStatus_ NotAvailableForTrading	Extended Hours Closed – No order entry.

3. Official Closing Price

The closing price is the last trade price upon close.

4. Finding the Latest Information

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

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