

S&P Capital IQ Real-Time Solutions

FeedOS™ Developer's Notice

TSE EQUITIES – Feed Update

Reference n°: 20150610 – 19921 – 26831 – 27231

Effective as of: 29 June 2015*

Action required from users: MANDATORY ACTION



* 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
FeedOS™ Developer's Notice: TSE EQUITIES – Feed Update
Reference 20150610 – 19921 – 26831 – 27231
June 15, 2015

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UPDATE OF THE TSE EQUITIES MARKET DATA STREAM

To reflect the changes caused by the introduction of the Leap Second on the TSE EQUITIES market data stream, S&P Capital IQ Real-Time Solutions has decided to enhance the content of FeedOS™.

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. FeedOS Technical Implementation](#)
- [3. Finding the Latest Information.](#)

1. Update Summary

Table 1 Current update summary

Notice Reference	20150610 – 19921 – 26831 – 27231
Exchanges	TSE EQUITIES
Concerned MICs	XFKA, XNGO, XSAP, XTKS
Internal Source ID	235, 236, 237, 238
Effective Date	2015-06-29*
Impact	<ul style="list-style-type: none">• Update of the Quotation Tags• Update of the Level1 Market Data Kinematics
Action required	MANDATORY ACTION - see sections: <ul style="list-style-type: none">• 2.2. Update of the Level1 Market Data Kinematics – OPEN• 2.4. Leap Second on the Level1 Market Data.

2. FeedOS Technical Implementation

Effective Monday, **June 29^{*} 2015**, S&P Capital IQ Real-Time Solutions enhances the quotation data and updates the Level1 Market Data Kinematics to accommodate the information disseminated on the TSE EQUITIES market data stream, as described below:

- [2.1. Changes to the Quotation Data](#)
- [2.2. Update of the Level1 Market Data Kinematics – OPEN](#)
- [2.3. Microsecond Timestamp Precision on the Level1 Market Data](#)
- [2.4. Leap Second on the Level1 Market Data.](#)

2.1. Changes to the Quotation Data

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

Table 2 Quotation tags added on the TSE EQUITIES market data stream

Tag Name	Numeric ID	Type
InternalDailyClosingPriceType	9155	Char

2.1.1. InternalDailyClosingPriceType

The values of the quotation tag **InternalDailyClosingPriceType** conveyed on the TSE EQUITIES market data stream are disseminated via FeedOS 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.

FeedOS implementation of the tag `InternalDailyClosingPriceType` is described in the table below (the values disseminated as of 2015-06-29 are highlighted in **green**):

Table 3 InternalDailyClosingPriceType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>InternalDailyClosingPriceType</code>	FeedOS tag name.
Numeric ID	9155	FeedOS 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>[Internal Specific Value]</i>	An internal specific value , detailing the type of daily closing price, as described below.

* This is the proposed day for the update of the standard version of the feed handler. For dedicated feed handlers, the date and Source IDs may differ. For the actual day when the changes to your custom feed handler will take effect, please contact your FeedOS™ project manager.

Table 3 InternalDailyClosingPriceType – technical implementation in QuantFEED® (Continued)

Component	Value	Description
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).

Quotation Data Sample

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

```
InstrumentStatusL1
-- 147/1002823
  BID: 2287.5      3100
  ASK: 2289        700
  LastPrice                float64{2287.5}
  LastTradeQty             float64{579100}
  DailyHighPrice           float64{2308.5}
  DailyLowPrice            float64{2270}
  DailyTotalVolumeTraded   float64{4738900}
  DailyTotalAssetTraded    float64{10858665050}
  LastTradePrice           float64{2287.5}
  LastTradeTimestamp       Timestamp{2015-06-10 06:00:00}
  InternalDailyOpenTimestamp Timestamp{2015-06-10 00:00:00:090}
  InternalDailyCloseTimestamp Timestamp{2015-06-10 06:00:00:521}
  InternalDailyHighTimestamp Timestamp{2015-06-10 03:39:25:108}
  InternalDailyLowTimestamp Timestamp{2015-06-10 00:00:10:620}
  InternalPriceActivityTimestamp Timestamp{2015-06-10 06:00:00:521}
  LowLimitPrice            float64{1787.5}
  HighLimitPrice           float64{2787.5}
  TradingStatus            18=NotAvailableForTrading
  TradingSessionId         int8{2}
  RegSHOAction             1=NoPriceTest
  PriorSessionsTotalAssetTraded float64{3542735750}
  PriorSessionsTotalVolumeTraded float64{1550800}
  SessionTotalVolumeTraded   float64{4738900}
  SessionOpeningPrice        float64{2293}
  SessionVWAPPrice          float64{2294.7616}
  SessionTotalAssetTraded    float64{10858665050}
  DailyOpeningPrice          float64{2275}
  DailyClosingPrice          float64{2287.5}
  PreviousDailyTotalVolumeTraded float64{4184100}
  PreviousDailyTotalAssetTraded float64{9603043450}
  PreviousDailyClosingPrice   float64{2283.5}
  PreviousBusinessDay        Timestamp{2015-06-09}
  CurrentBusinessDay         Timestamp{2015-06-10}
  InternalDailyClosingPriceType char{a}
  InternalCrossIndicator     bool{False}
  PriceActivityMarketTimestamp Timestamp{2015-06-10 06:00:00}
  InternalDailyBusinessDayTimestamp Timestamp{2015-06-10 00:00:00:090}
```

2.2. Update of the Level1 Market Data Kinematics – OPEN

In the Level1 Market Data Kinematics **before 2015-06-29**, at 00:00 UTC Time, the exchange sent the OPEN signal and the Trading Status was set to 17=ReadyToTrade, as shown in the example below:

```

"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"

TE 00:00:00:085.762 309284167 * * 2231 194100 * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
VU 00:00:00:085.762 309284167 MARKET_TSE_BidMarketOrderVolume=99300
TE 00:00:00:097.252 309284167 * * 2231 194800 2231.5 194100
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
SI 00:00:00:103.731 309284167 OPEN *
TE 00:00:00:103.731 309284167 * * * * * * * 0
VU 00:00:00:103.731 309284167 TradingSessionId=1 TradingStatus=17
TE 00:00:00:139.616 309284167 * * * * * * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
VU 00:00:00:139.616 309284167 MARKET_TSE_BidSpecialQuotePrice=?
MARKET_TSE_AskSpecialQuotePrice=?
TE 00:00:00:142.454 309284167 * * 2231 195000 * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}

```

In the Level1 Market Data Kinematics **after 2015-06-29**, the first trade will trigger the OPEN signal and set the Trading Status to 17=ReadyToTrade, as shown in the example below:

```

"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"

TE 00:00:00:085.762 309284167 * * 2231 194100 * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
VU 00:00:00:085.762 309284167 MARKET_TSE_BidMarketOrderVolume=99300
TE 00:00:00:097.252 309284167 * * 2231 194800 2231.5 194100
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
TE 00:00:00:139.616 309284167 * * * * * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
VU 00:00:00:139.616 309284167 MARKET_TSE_BidSpecialQuotePrice=?
MARKET_TSE_AskSpecialQuotePrice=?
TE 00:00:00:142.454 309284167 * * 2231 195000 * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
TE 00:00:00:148.938 309284167 * * 2231 194800 * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
TE 00:00:00:156.298 309284167 * * * * 2231.5 194300
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
TE 00:00:00:159.193 309284167 * * 2231 195000 * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
VU 00:00:00:159.193 309284167 MARKET_TSE_BidMarketOrderVolume=99500
MARKET_TSE_AskMarketOrderVolume=145000
TE 00:00:00:163.046 309284167 * * 2231 194300 2231 194300
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
TE 00:00:00:168.221 309284167 * * 2231 195000 2231.5 194300
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
TE 00:00:00:238.518 309284167 * * 2231 195300 * *
MARKET_TSE_BidQuoteCondition=char{0},MARKET_TSE_AskQuoteCondition=char{0}
VU 00:00:00:238.518 309284167 MARKET_TSE_BidMarketOrderVolume=99800
SI 00:00:12:103.731 309284167 OPEN *
TE 00:00:12:103.731 309284167 * * * * * * O
VU 00:00:12:103.731 309284167 TradingSessionId=1 TradingStatus=17
TE 00:00:12:103.731 309284167 2231 194300 * * * * HL
TradeCondition=E=opening_reopening_trade_detail

```

2.3. Microsecond Timestamp Precision on the Level1 Market Data

Effective **2015-06-29**, the server timestamps will display microsecond units on the Level1 Market Data, as shown in the example below (highlighted in **green**):

```

"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"

TE 19:55:07:508.521 309284167 * * * * 41.27 700@2
TE 20:00:48:238.168 309284167 * * * * 47.22 100@1
TE 20:00:48:240.254 309284167 * * * * 48.31 100@1

```


2.4. Leap Second on the Level1 Market Data

Effective **2015-06-29**, the Tokyo Stock Exchanges introduces a one-second adjustment to Coordinated Universal Time (UTC) in order to keep its time of day close to the mean solar time, or UT1.

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: <https://support.quanthouse.com>.