S&P Capital IQ Real-Time Solutions

FeedOS™ Developer's Notice

SGX EQUITIES – Feed Update

Reference n°: 20150611 - 26685 - 26458 - 27245

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: SGX EQUITIES – Feed Update Reference 20150611 – 26685 – 26458 – 27245 June 15, 2015

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To reflect the changes caused by the refinement of the referential and quotation data on the SGX 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	20150611 – 26685 – 26458 – 27245	
Exchanges	SGX EQUITIES	
Concerned MICs	XSES	
Internal Source ID	221	
Effective Date	2015-06-29 [*]	
Impact	Update of the Referential Tags Update of the Quotation Tags Update of the Level1 Market Data Kinematics	
Action required	MANDATORY ACTION - see sections: • 2.2.1. DailyClosingPrice.	

2. FeedOS Technical Implementation

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

- 2.1. Changes to the Referential Data
- 2.2. Changes to the Quotation Data
- 2.3. Microsecond Timestamp Precision on the Level1 Market Data.

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 SGX EQUITIES market data stream:

Table 2 Referential tags added on the SGX EQUITIES market data stream

Tag Name	Numeric ID	Туре
SegmentMIC	9534	String

S&P Capital IQ Real-Time Solutions updates the referential tags below to accommodate the information disseminated on the SGX EQUITIES market data stream:

Table 3 Referential tags disseminating updated values on the SGX EQUITIES market data stream

Tag Name	Numeric ID	Туре
Description (Reminder)	107	String

2.1.1. SegmentMIC

The values of the referential tag SegmentMIC conveyed on the SGX EQUITIES market data stream are disseminated via FeedOS data stream in Referential to specify the child MIC.

FeedOS implementation of the tag SegmentMIC is described in the table below:

Table 4 SegmentMIC - technical implementation in FeedOS

Component	Value	Description
Tag Name	SegmentMIC	FeedOS tag name.
Numeric ID	9534	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions 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 child MIC.
Possible Values	XSCA	Singapore Catalist Market

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.

2.1.2. Description (Reminder)

The values of the referential tag **Description** conveyed on the SGX EQUITIES market data stream are disseminated via FeedOS data stream in *Referential* to characterize an instrument.

FeedOS implementation of the tag Description is detailed in the table below:

Table 5 Description – technical implementation in FeedOS

Component	Value	Description
Tag Name	Description	FeedOS tag name.
Numeric ID	107	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	String	String data type.
Format / Possible Values	[Exchange Specific Value]	An exchange specific value characterizing the instrument.

Referential Data Sample

Below is an example showing the current implementation of the newly added (in green) and updated (in blue) referential tags:

```
instr # 226/1011135 = 474967487
   PriceCurrency
                              string{SGD}
   Symbol 3
                              string{5I2W_RY}
   Description
                              string{AP Strat W190506}
   SecurityType
                              string{WAR}
   FOSMarketId
                              XSES
   ContractMultiplier
                              float64{1}
   CFICode
                              string{RWXXXX}
   RoundLot
                              float64{100}
   InternalCreationDate
                              Timestamp{2014-05-07 00:00:48:735}
   InternalModificationDate
                              Timestamp{2015-05-12 07:54:43:071}
   InternalSourceId
                              uint16{51}
   InternalEntitlementId
                              SGX
   InternalMagic
                              string{88-1-8-0-30169-0-0}
   LocalCodeStr
                              string{5I2W_RY}
                              string{SG5AE4000005}
   ISIN
   PriceIncrement_dynamic_TableId
                                      uint32{3342436}
   OperatingMIC string{XSES}
   SegmentMIC
                              string{XSCA}
```

2.2. Changes to the Quotation Data

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

Table 6 Quotation tags added on the SGX EQUITIES market data stream

Tag Name	Numeric ID	Туре
DailyClosingPrice	9132	Float64

2.2.1. DailyClosingPrice

The values of the quotation tag **DailyClosingPrice** conveyed on the SGX EQUITIES market data stream are disseminated via FeedOS data stream in *Other Values* to specify the final price at which a security is traded on a given trading day:

- 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.

FeedOS implementation of the tag DailyClosingPrice is described in the table below:

Table 7 DailyClosingPrice – technical implementation in FeedOS

Component	Value	Description
Tag Name	DailyClosingPrice	FeedOS tag name.
Numeric ID	9132	FeedOS unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Float64	Float64 data type.
Format / Possible Values	[Exchange Specific Value]	An exchange specific value , specifying the final price at which a security is traded on a given trading day.

Quotation Data Sample

Below are several examples showing the current implementation of the newly added (in green) quotation tags:

```
InstrumentStatusL1
-- 226/1512
       BID: 10 3900
                        @1
       ASK: 10.68
                        100
                                @1
                                        float64{10.68}
       LastPrice
       LastTradeQty
                                        float64{1900}
       DailyHighPrice
                                        float64{11}
       DailyLowPrice
                                        float64{8}
                                        float64{45200}
       DailyTotalVolumeTraded
       DailyTotalAssetTraded
                                        float64{473188}
       LastTradePrice
                                        float64{10.68}
       LastTradeTimestamp
                                        Timestamp{2015-06-11 09:04:41:167}
                                        Timestamp{2015-06-11 02:31:08:497}
       InternalDailyOpenTimestamp
       InternalDailyCloseTimestamp
                                        Timestamp{2015-06-11 09:06:00:486}
       InternalDailyHighTimestamp
                                        Timestamp{2015-06-11 06:25:19:626}
       InternalDailyLowTimestamp
                                        Timestamp{2015-06-11 05:44:00:510}
       InternalPriceActivityTimestamp
                                        Timestamp{2015-06-11 09:06:00:486}
       LowLimitPrice
                                        float64{9.62}
       HighLimitPrice
                                        float64{11.74}
       TradingStatus
                                        18=NotAvailableForTrading
       LastOffBookTradePrice
                                        float64{0}
       LastOffBookTradeQty
                                        float64{30000}
       LastOffBookTradeTimestamp
                                        Timestamp{2015-06-11 06:15:59:031}
       DailyClosingPrice
                                        float64{10.68}
       CurrentBusinessDay
                                        Timestamp{2015-06-11}
       LastAuctionPrice
                                        float64{10.68}
        LastAuctionVolume
                                        float64{4000}
       DailyTotalOffBookVolumeTraded
                                        float64{75000}
       DailyTotalOffBookAssetTraded
                                        float64{0}
       LastAuctionImbalanceSide
                                        char{s}
       LastAuctionImbalanceVolume
                                        float64{100}
       InternalDailyClosingPriceType
                                        char{d}
       InternalLastAuctionTimestamp
                                        Timestamp{2015-06-11 09:02:19:069}
       PriceActivityMarketTimestamp
                                        Timestamp{2015-06-11 09:04:41:167}
       TradingReferencePrice
                                        float64{10.68}
       MARKET_OMNET_OMX_TradingStateName
                                                string{CLOSE}
```

```
BEFORE 2015-06-29
    09:06:00:003.824 474967487
ST
                                   CLOSE
     09:06:00:003.824 474967487
     09:06:00:003.824 474967487
                                   InternalDailyClosingPriceType=d
MARKET_OMNET_OMX_TradingStateName=CLOSE TradingStatus=18
AFTER 2015-06-29
SI
    09:06:00:611.142 474967487
                                    CLOSE
TF
    09:06:00:611.142 474967487
    09:06:00:611.142 474967487
                                   MARKET_OMNET_OMX_TradingStateName=CLOSE TradingStatus=18
VU
VU
    09:07:16:351.689 474967487
                                   DailyClosingPrice=10.68 InternalDailyClosingPriceType=a
```

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):

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.