## **S&P Capital IQ Real-Time Solutions**

# **QuantFEED® Developer's Notice**

## **CBOE FUTURES – Feed Update**

Reference n°: 20140828 - 21187 - 22373

Effective as of: 22 September 2014\*

Action required from users: Attention Required



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 20140828 – 21187 – 22373 September 05, 2014

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# UPDATE OF THE CBOE FUTURES MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the CBOE FUTURES 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	20140828 – 21187 – 22373	
Exchanges	CBOE FUTURES	
Concerned MICs	XCBF	
Internal Source ID	228, 229	
Effective Date	2014-09-22*	
Impact	<ul><li> Update of the Referential Tags</li><li> Update of the Quotation Tags</li><li> Addition of the MBL Data</li></ul>	
Action required	Attention Required	

# 2. QuantFEED® Technical Implementation

Effective Monday, **September 22**\*, **2014**, S&P Capital IQ Real-Time Solutions enhances the referential and quotation data, and introduces MBL Data to accommodate the new information disseminated on the CBOE FUTURES market data stream, as described below:

• 2.1. Changes to the Referential Data

<sup>\*</sup> 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.

- 2.2. Changes to the Quotation Data
- 2.3. Addition of the MBL 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 CBOE FUTURES market data stream:

Table 2 Referential tags added on the CBOE FUTURES market data stream

Tag Name	Numeric ID	Туре
PriceCurrency	15	String

## 2.1.1. PriceCurrency

The values of the referential tag **PriceCurrency** conveyed on the CBOE FUTURES market data stream are disseminated via QuantFEED\* data stream in *Referential* to specify the currency of the price.

QuantFEED\* implementation of the values currently available for the tag PriceCurrency is described in the table below:

Table 3 PriceCurrency – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	PriceCurrency	QuantFEED® tag name.
Numeric ID	15	QuantFEED® 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 <b>exchange specific value</b> , specifying the currency of the price.
Possible Values	USD	United States Dollar

## **Referential Data Sample**

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

```
instr \# 303/1055 = 635438111
   PriceCurrency
                                string{USD}
   Symbol
                                string{VX_M4_CF}
   Description
                                string{S&P 500 Volatility Index (VIX) Futures}
   SecurityType
                                string{FUT}
   StdMaturity
                                string{201406}
   FOSMarketId
                                XCBF
   ContractMultiplier
                                float64{1000}
   PriceType
                                uint8{3}
   CFICode
                                string{FFIXXX}
                                Timestamp{2014-10-14 14:21:41:870}
   InternalCreationDate
   InternalModificationDate
                                Timestamp{2014-10-14 14:21:41:870}
   InternalSourceId
                                uint16{228}
   LocalCodeStr
                                string{1568963813}
   PriceIncrement_static
                                float64{0.05}
   UnderlyingLocalCodeStr
                                string{VIX}
   MaturityYear
                                uint16{2014}
   MaturityMonth
                                uint8{6}
   MaturityDay
                                uint8{18}
   OperatingMIC
                                string{XCBO}
    SegmentMIC
                                string{XCBF}
```

## 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 CBOE FUTURES market data stream:

Table 4 Quotation tags added on the CBOE FUTURES market data stream

Tag Name	Numeric ID	Туре
SettlementPriceDate	9380	Timestamp
OpenInterestDate	9382	Timestamp
SettlementPriceType	9383	Char

#### 2.2.1. SettlementPriceDate

The values of the quotation tag **SettlementPriceDate** conveyed on the CBOE FUTURES market data stream are disseminated via QuantFEED\* data stream in *Other Values* to indicate the date of the settlement price:

- 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 SettlementPriceDate is described in the table below:

Table 5 SettlementPriceDate – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	SettlementPriceDate	QuantFEED® tag name.
Numeric ID	9380	QuantFEED® unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Timestamp	Timestamp data type.
Format / Possible Values	[Exchange Specific Value]	An <b>exchange specific value</b> , indicating the date of the settlement price.

#### 2.2.2. OpenInterestDate

The values of the quotation tag **OpenInterestDate** conveyed on the CBOE FUTURES market data stream are disseminated via QuantFEED\* data stream in *Other Values* to indicate the date of the derivative contracts that have not been settled in the immediately previous time period for a specific underlying security:

- 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 tag OpenInterestDate is described below:

Table 6 OpenInterestDate – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	OpenInterestDate	QuantFEED® tag name.
Numeric ID	9382	QuantFEED® unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Timestamp	Timestamp data type.
Format / Possible Values	[Exchange Specific Value]	An <b>exchange specific value</b> , indicating the date of the derivative contracts that have not been settled in the immediately previous time period for a specific underlying security.

## 2.2.3. SettlementPriceType

The values of the quotation tag **SettlementPriceType** conveyed on the CBOE FUTURES market data stream are disseminated via QuantFEED\* data stream in *Other Values* to indicate the type of settlement price:

- 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 SettlementPriceType is described in the following table (currently disseminated values are in green):

Table 7 SettlementPriceType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	SettlementPriceType	QuantFEED® tag name.
Numeric ID	9383	QuantFEED® unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Char	Timestamp data type.
Format	[Exchange Specific Value]	An <b>exchange specific value</b> , indicating the type of settlement price.
Possible Values	a	Official – Explicit Official Daily Settlement Price, as distributed by the exchange.
	b	Preliminary – Settlement Price subject to change until the Official Daily Settlement Price is published.
	z	Manual – Settlement Price disseminated manually (in case of a correction).
	0	Undefined

## **Quotation Data Sample**

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

```
InstrumentStatusL1
-- 303/1055
        BID: 14.85
                        189
        ASK: 14.9
                        189
                                         float64{14.9}
        LastPrice
        LastTradeQty
                                         float64{1}
                                         float64{15.25}
        DailyHighPrice
                                         float64{14.65}
        DailyLowPrice
        DailyTotalVolumeTraded
                                         float64{88024}
        DailyTotalAssetTraded
                                         float64{15244.5}
        LastTradePrice
                                         float64{14.9}
        LastTradeTimestamp
                                         Timestamp{2014-10-14 09:18:59:596}
        InternalDailyOpenTimestamp
                                         Timestamp{2014-10-13 20:30:34:010}
        InternalDailyCloseTimestamp
                                         Timestamp{2014-10-13 20:15:00:032}
        InternalDailyHighTimestamp
                                         Timestamp{2014-10-13 20:32:14:299}
        InternalDailyLowTimestamp
                                         Timestamp{2014-10-13 20:30:42:233}
        InternalPriceActivityTimestamp
                                        Timestamp{2014-10-14 09:23:24:762}
        TradingStatus
                                         17=ReadyToTrade
        DailyOpeningPrice
                                         float64{14.72}
        DailySettlementPrice
                                         float64{14.9}
        PreviousDailyTotalVolumeTraded
                                        float64{141081}
        PreviousDailyTotalAssetTraded
                                         float64{1409483.02}
        PreviousDailyClosingPrice
                                         float64{14.9}
        PreviousBusinessDay
                                         Timestamp\{2014-10-13\}
        CurrentBusinessDay
                                         Timestamp{2014-10-14}
        PreviousDailySettlementPrice
                                         float64{14.75}
        LastAuctionPrice
                                         float64{14.85}
        LastAuctionVolume
                                         float64{24}
        OpenInterest
                                         float64{152055}
        InternalLastAuctionTimestamp
                                         Timestamp{2014-10-14 07:00:10:288}
        PriceActivityMarketTimestamp
                                         Timestamp{2014-10-14 09:23:24:762}
        SettlementPriceDate
                                         Timestamp{2014-10-14}
        OpenInterestDate
                                         Timestamp{2014-10-13}
        SettlementPriceType
                                         char{a}
```

## 2.3. Addition of the MBL Data

Effective 2014-09-22, S&P Capital IQ Real-Time Solutions adds MBL data on the CBOE FUTURES market data stream. The MBL Book has a 5-level depth.

<sup>\*</sup> The MBL and MBO data may not be included by default in your Level1 data subscription, but sold separately. Depending on your contract, additional terms, conditions and fees may apply. For more details about the subscription options, please contact S&P Capital IQ Real-Time Solutions.

# 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.