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

S&P CAPITAL IQ
McGRAW HILL FINANCIAL

* 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** | • Update of the Referential Tags<br>• Update of the Quotation Tags<br>• Addition of the MBL Data |
| **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

* 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 | Type |
|---|---|---|
| `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. |
| **Type** | `String` | String data type. |
| **Format** | *`[Exchange Specific Value]`* | An ***exchange specific value***, 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}
    InternalCreationDate        Timestamp{2014-10-14 14:21:41:870}
    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 | Type |
|---|---|---|
| `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 Level1 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. |
| **Type** | `Timestamp` | Timestamp data type. |
| **Format / Possible Values** | *`[Exchange Specific Value]`* | An ***exchange specific value***, 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 Level1 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. |
| **Type** | `Timestamp` | Timestamp data type. |
| **Format / Possible Values** | *`[Exchange Specific Value]`* | An ***exchange specific value***, 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 Level1 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. |
| **Type** | `Char` | Timestamp data type. |
| **Format** | *[Exchange Specific Value]* | An ***exchange specific value***, 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
        LastPrice                       float64{14.9}
        LastTradeQty                    float64{1}
        DailyHighPrice                  float64{15.25}
        DailyLowPrice                   float64{14.65}
        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.

* 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.