

QuantFEED® Developer's Notice

ICE – Feed Update

Reference n°: 20140721 – 20380 – 21955 – Update 01

Effective as of: 28 July 2014*

Action required from users: MANDATORY ACTION



* 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 20140721 – 20380 – 21955 – Update 01
July 21, 2014

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UPDATE OF THE ICE MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the ICE 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	20140721 – 20380 – 21955 – Update 01
Exchanges	ICE
Concerned MICs	ICEU, IFCA, ICUS
Internal Source ID	66, 88, 188
Effective Date	2014-07-28*
Impact	<ul style="list-style-type: none">• Update of the Referential Tags• Update of the Quotation Tags
Action required	MANDATORY ACTION – see sections 2.1.2. CFI Code .

2. QuantFEED® Technical Implementation

Effective Monday, **July 28^{*}, 2014**, S&P Capital IQ Real-Time Solutions enhances the referential and quotation data to accommodate the new information disseminated on the ICE market data stream, as described below:

- [2.1. Changes to the Referential Data](#)
- [2.2. Changes to the Quotation 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.

2.1. Changes to the Referential Data

S&P Capital IQ Real-Time Solutions [updates](#) the values of the referential tags below to accommodate the information disseminated on the ICE market data stream:

Table 2 Referential tags added on the ICE market data stream

Tag Name	Numeric ID	Type
PriceCurrency	15	String
CFIcode	461	String

2.1.1. PriceCurrency

The values of the referential tag **PriceCurrency** conveyed on the ICE 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	<i>[Exchange specific value]</i>	An exchange specific value , specifying the currency of the price.
Possible Values	EUR	Euro
	USD	United States Dollar
	USX	United States Cents

2.1.2. CFIcode

The values of the referential tag **CFI Code** conveyed on the ICE market data stream are disseminated via QuantFEED® data stream in *Referential* to specify the standardized identification code of an instrument.

QuantFEED® implementation of the tag CFIcode is described in the table below (existing values are in black, newly added values are in green, and removed values are in ~~crossed-out red~~):

Table 4 CFIcode – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	CFIcode	QuantFEED® tag name.
Numeric ID	461	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	<i>[Exchange specific value]</i>	An exchange specific value , detailing the standardized identification code of an instrument.

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

Component	Value	Description
Possible Values	FCAXXS	Futures - Commodities Futures - Agriculture, forestry and fishing - Spread
	FCAXXX	Futures - Commodities Futures - Agriculture, forestry and fishing
	FCEXXS	Futures - Commodities Futures - Extraction Resources - Spread
	FCEXXX	Futures - Commodities Futures - Extraction Resources
	FCXXXX	Futures - Commodities Futures
	FFCXXS	Futures - Financial Futures - Currencies - Spread
	FFCXXX	Futures - Financial Futures - Currencies
	FFIXXS	Futures - Financial Futures - Indices - Spread
	FFIXXX	Futures - Financial Futures - Indices
	FFMXXS	Futures - Financial Futures - Others - Spread
	FFMXXX	Futures - Financial Futures - Others
	MRXXXX	Other Instruments - Referential Instruments - Indices
	MRXXXX	Other Instruments - Referential Instruments
	MXXXXX	Other Instruments
	OCAFXX	Options - Call Options - American - Futures
	OCAXXX	Options - Call Options - American
	OCEFXX	Options - Call Options - European - Futures
	OCEXXX	Options - Call Options - European
	OPAFXX	Options - Put Options - American - Futures
	OPAXXX	Options - Put Options - American
	OPEFXX	Options - Put Options - European - Futures
	OPEXXX	Options - Put Options - European

Note The new ICE feed handler allows the management of Options and User-Defined Strategies (UDS) on ICE. However, Options and UDSs are not included by default in the ICE market data stream. For more details about your subscription options, please contact S&P Capital IQ Real-Time Solutions.

Moreover, Trade at Settlement instruments may have negative prices.

The example below shows the list SecurityTypes and CFICodes, before and after 2014-07-28:

BEFORE 2014-07-28

```
{ ICEU FUT      FCXXXX }
{ ICEU FUT      MXXXXX }
{ ICEU MLEG     MRXXXX }
{ ICEU OPT      OCAXXX }
{ ICEU OPT      OCEXXX }
{ ICEU OPT      OPAXXX }
{ ICEU OPT      OPEXXX }
{ IFCA FUT      FCXXXX }
{ IFCA MLEG     MRXXXX }
{ IFCA OPT      OCAXXX }
{ IFCA OPT      OPAXXX }
{ ICUS FUT      FCXXXX }
{ ICUS FUT      MXXXXX }
{ ICUS INDEX    MRXXXX }
{ ICUS MLEG     MRXXXX }
{ ICUS OPT      OCAXXX }
{ ICUS OPT      OPAXXX }
```

AFTER 2014-07-28

```
{ ICEU FUT      FCXXXX }
{ ICEU FUT      FFMXXX }
{ ICEU FUT      MXXXXX }
{ ICEU MLEG     FCEXXS }
{ ICEU MLEG     FFMXXX }
{ ICEU OPT      OCAFXX }
{ ICEU OPT      OCEFXX }
{ ICEU OPT      OPAFXX }
{ ICEU OPT      OPEFXX }
{ IFCA FUT      FCAXXX }
{ IFCA MLEG     FCAXXS }
{ IFCA OPT      OCAFXX }
{ IFCA OPT      OPAFXX }
{ ICUS FUT      FCAXXX }
{ ICUS FUT      FFCXXX }
{ ICUS FUT      FFIXXX }
{ ICUS FUT      MXXXXX }
{ ICUS MLEG     FCAXXS }
{ ICUS MLEG     FFCXXS }
{ ICUS MLEG     FFIXXS }
{ ICUS OPT      OCAFXX }
{ ICUS OPT      OPAFXX }
```

Referential Data Sample

Below is an example of the current implementation of the updated (in [blue](#)) referential tags:

```

geti 906729497
instr # 432/759833 = 906729497
  PriceCurrency      string{EUR}
  Symbol             string{ECF-ECF}
  Description         string{EUA Spr - EUA - Dec16/Dec20}
  SecurityType        string{MLEG}
  StdMaturity         string{201612}
  FOSMarketId        ICEU
  Factor              float64{1000}
  ContractMultiplier float64{1000}
  CFICode             string{FCEXS}
  NbLegs              uint8{2}
  SecuritySubType     string{Future/Month-Future/Month}
  ProductComplex      string{+01ECF 20161219F -01ECF 20201214F}
  InternalCreationDate Timestamp{2014-03-30 21:00:11:392}
  InternalModificationDate Timestamp{2014-08-14 00:24:12:414}
  InternalSourceId    uint16{88}
  InternalEntitlementId int32{1041}
  LocalCodeStr        string{400227}
  PriceIncrement_static float64{0.01}
  MaturityYear         uint16{2016}
  MaturityMonth        uint8{12}
  MaturityDay          uint8{19}
  OperatingMIC         string{IFEU}
  LegFOSInstrumentCode uint32{906729541}
  LegFOSInstrumentCode_1 uint32{906729537}
  LegFIXSide           '1'=Buy
  LegFIXSide_1         '2'=Sell
  MARKET_ICE_ContractSymbol string{ECF FMZ0016-ECF FMZ0020}

```

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 ICE market data stream:

Table 5 Quotation tags added on the ICE market data stream

Tag Name	Numeric ID	Type
OpenInterestDate	9382	Timestamp
SettlementPriceDate	9380	Timestamp
PreviousSettlementPriceDate	9381	Timestamp
SettlementPriceType	9383	Char
PreviousSettlementPriceType	9384	Char

2.2.1. OpenInterestDate

The values of the quotation tag **OpenInterestDate** conveyed on the ICE 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	<code>OpenInterestDate</code>	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	<i>[Exchange Specific Value]</i>	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.

2.2.2. SettlementPriceDate

The values of the quotation tag **SettlementPriceDate** conveyed on the ICE 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 below:

Table 7 SettlementPriceDate – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>SettlementPriceDate</code>	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	<i>[Exchange specific value]</i>	An exchange specific value , indicating the date of the settlement price.

2.2.3. PreviousSettlementPriceDate

The values of the quotation tag `PreviousSettlementPriceDate` conveyed on the ICE market data stream are disseminated via QuantFEED® data stream in *Other Values* to indicate the date of the previous 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 `PreviousSettlementPriceDate` is described below:

Table 8 PreviousSettlementPriceDate – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>PreviousSettlementPriceDate</code>	QuantFEED® tag name.
Numeric ID	9381	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	<i>[Exchange specific value]</i>	An exchange specific value , indicating the date of the previous settlement price.

2.2.4. SettlementPriceType

The values of the quotation tag `SettlementPriceDate` conveyed on the ICE 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:

Table 9 `SettlementPriceType` – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>SettlementPriceType</code>	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	<i>[Exchange Specific Value]</i>	An exchange specific value , indicating the type of settlement price.
Possible Values	a	Official Daily Settlement Price
	b	Official Indicative Settlement Price

2.2.5. PreviousSettlementPriceType

The values of the quotation tag `PreviousSettlementPriceDate` conveyed on the ICE market data stream are disseminated via QuantFEED® data stream in *Other Values* to indicate the type of the previous 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 `PreviousSettlementPriceType` is described in the following table:

Table 10 `PreviousSettlementPriceType` – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	<code>PreviousSettlementPriceType</code>	QuantFEED® tag name.
Numeric ID	9384	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	<i>[Exchange Specific Value]</i>	An exchange specific value , indicating the type of the previous settlement price.
Possible Values	a	Official Daily Settlement Price
	b	Official Indicative Settlement Price

Quotation Data Sample

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

```
InstrumentStatusL1
-- 507/772729
    BID: 1153.3      14      @9
    ASK: 1153.5      16      @12
    LastPrice                float64{1153.4}
    LastTradeQty              float64{1}
    DailyHighPrice            float64{1165}
    DailyLowPrice             float64{1146}
    DailyTotalVolumeTraded    float64{77609}
    DailyTotalAssetTraded     float64{89681449.8000012}
    LastTradePrice            float64{1153.4}
    LastTradeTimestamp        Timestamp{2014-08-14 15:23:23:342}
    InternalDailyOpenTimestamp Timestamp{2014-08-14 00:00:00:063}
    InternalDailyCloseTimestamp Timestamp{2014-08-13 22:00:00:027}
    InternalDailyHighTimestamp Timestamp{2014-08-13 17:25:34:174}
    InternalDailyLowTimestamp  Timestamp{2014-08-13 19:44:44:868}
    InternalPriceActivityTimestamp Timestamp{2014-08-14 15:23:23:357}
    TradingStatus              17=ReadyToTrade
    LastOffBookTradePrice      float64{1167.9}
    LastOffBookTradeQty        float64{254}
    LastOffBookTradeTimestamp  Timestamp{2014-08-07 20:48:14:917}
    SessionVWAPPrice           float64{1155.55}
    DailyOpeningPrice          float64{1161.5}
    PreviousDailyTotalVolumeTraded float64{90341}
    PreviousDailyTotalAssetTraded float64{105088903.699998}
    PreviousDailyClosingPrice   float64{1161.6}
    PreviousBusinessDay         Timestamp{2014-08-13}
    CurrentBusinessDay          Timestamp{2014-08-14}
    PreviousDailySettlementPrice float64{1161.6}
    LastAuctionPrice            float64{1161.5}
    DailyTotalOffBookVolumeTraded float64{0}
    DailyTotalOffBookAssetTraded float64{0}
    OpenInterest                float64{327392}
    InternalLastAuctionTimestamp Timestamp{2014-08-14 23:51:16:436}
    PriceActivityMarketTimestamp Timestamp{2014-08-14 15:23:23:357}
    SettlementPriceDate         Timestamp{2014-08-14}
    PreviousSettlementPriceDate  Timestamp{2014-08-13}
    OpenInterestDate            Timestamp{2014-08-13}
    SettlementPriceType          char{a}
    PreviousSettlementPriceType  char{a}
    MARKET_ICE_BlockVolume      float64{112}
    MARKET_ICE_EFPVolume        float64{1000}
```

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>.