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

# **QuantFEED® Feed Description**

## **ICE Feed**

Reference n°: 20130816



S&P Capital IQ's Real-Time Solutions (QuantHouse\*) – QuantFEED\* QuantFEED\* Feed Description Reference 20130816 August 16, 2013

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# TABLE OF CONTENTS

QuantFEED® ICE Feed Description
1. Referential Data
1.1. Available Markets and Branches
1.1.1. Markets
1.1.2. Branches
1.2. Types of Instruments
1.2.1. Futures
1.2.2. Index
1.2.3. Multilegs
1.2.4. Options/Futures Trade at Settlement5
1.2.5. Options
1.3. Specific Referential Tags
1.3.1. Contract Symbol
2. Quotation Data
2.1. Quotation Values
2.2. Trading Status
2.3. Specific Quotation Tags9
2.3.1. Trade Conditions
2.3.1.1. Aggressor Side
2.3.1.2. Block Trade Type
2.3.1.3. System Priced Leg Type
2.3.2. Other Specific Values
2.3.2.1. Block Volume
2.3.2.2. EFS Volume
2.3.2.3. EFP Volume
2.3.2.4. Interval Price Limits on Hold
3. Special Behavior
4. Official Closing Price
5. Finding the Latest Information.



# QUANTFEED® ICE FEED DESCRIPTION

As part of S&P Capital IQ's Real-Time Solutions's QuantFEED® documentation, this feed description provides you with details about the types of data broadcast on the ICE market data stream, their possible values and current QuantFEED® technical implementation.

The topics this feed description covers include:

- 1. Referential Data
- 2. Quotation Data
- 3. Special Behavior
- 4. Official Closing Price
- 5. Finding the Latest Information.

## 1. Referential Data

The following sections describe the characteristics of the referential data on ICE market data stream, in terms of:

- 1.1. Available Markets and Branches
- 1.2. Types of Instruments.

## 1.1. Available Markets and Branches

This section details the list of Markets and Branches available on ICE market data stream.

## 1.1.1. Markets

The ICE market data stream broadcasts informations about the following markets:

Table 1 List of markets available on ICE market data stream

QuantFEED® Market ID	Market	
	Intercontinental Exchange Ltd.	
IEPA	<b>Note:</b> This MIC has been introduced to accommodate data about the OTC instruments broadcast on a possible upcoming version of ICE market data stream. Currently, S&P Capital IQ's Real-Time Solutions does not disseminate any instrument details associated with this MIC.	
ICEU	Intercontinental Exchange – ICE Futures Europe	
IFCA	Intercontinental Exchange – ICE Futures Canada	
ICUS	Intercontinental Exchange United States	

The following example shows the list of markets available on ICE market data stream and their IDs, returned by the command dumps:

```
MARKETS
market # 290
               CC=GB/UNITED KINGDOM/LONDON, DESCR=INTERCONTINENTAL EXCHANGE LTD.,
WEB=www.intcx.com
    MIC = IEPA
   TimeZone = America/New_York
    Country = US
    NbMaxInstruments = 2000000
              CC=UK/UNITED KINGDOM/LONDON, DESCR=INTERCONTINENTAL EXCHANGE - ICE FUTURES
market # 432
EUROPE, WEB=www.theice.com
    MIC = ICEU
    TimeZone = Europe/London
    Country = UK
    NbMaxInstruments = 2000000
market # 471
               CC=CA/CANADA/WINNIPEG, DESCR=ICE FUTURES CANADA, WEB=www.theice.com
    MIC = IFCA
    TimeZone = America/Winnipeg
    Country = US
    NbMaxInstruments = 2000000
market # 507 CC=US/UNITED STATES OF AMERICA/NEW YORK, DESCR=ICE FUTURES U.S. INC,
WEB=www.theice.com
    MIC = ICUS
   TimeZone = America/New_York
    Country = US
    NbMaxInstruments = 2000000
```

## 1.1.2. Branches

The example below shows the list of branches available on ICE market data stream, returned by the command dumps. Each branch displays the following details: FOSMarketID, SecurityType, CFICode and Quantity (of instruments):

```
BRANCHES
   { ICEU FUT FCXXXX } qty: 5102
   { ICEU FUT MXXXXX } qty: 60
   { ICEU MLEG MRXXXX } qty: 4727
   { ICEU OPT OCAXXX } qty: 19696
   { ICEU OPT OCEXXX } qty: 12688
   { ICEU OPT OPAXXX } qty: 19696
   { ICEU OPT OPEXXX } qty: 12688
   { IFCA FUT FCXXXX } qty: 56
   { IFCA MLEG MRXXXX } qty: 219
   { IFCA OPT OCAXXX } qty: 3006
   { IFCA OPT OPAXXX } qty: 3006
   { ICUS FUT FCXXXX } qty: 584
   { ICUS FUT MXXXXX } qty: 92
   { ICUS INDEX MRIXXX } qty: 24
   { ICUS MLEG MRXXXX } qty: 2496
   { ICUS OPT OCAXXX } qty: 22670
    { ICUS OPT OPAXXX } qty: 22670
```

## 1.2. Types of Instruments

The following sections illustrate the instruments' characteristics on ICE market data stream, according to their type:

- 1.2.1. Futures
- 1.2.2. Index
- 1.2.3. Multilegs
- 1.2.4. Options/Futures Trade at Settlement
- 1.2.5. Options.

Please note that some of the **multileg instruments** do not have a full description of the leg ratios, as the exchange message does not disseminate this type of information. For more details, please refer to the Intercontinental Exchange Web site to identify the ratio of the crack spread and other strategy types.

## **1.2.1. Futures**

The sample below illustrates the details of a future:

```
instr # 507/750280 = 1064006344
   PriceCurrency
                                string{USX}
   Symbol 3
                                string{CT}
   Description
                                string{Cotton No. 2 TAS - NYCC - Mar14}
   SecurityType
                                string{FUT}
   StdMaturity
                                string{201403}
   FOSMarketId
                                ICUS
                                float64{50000}
   Factor
   ContractMultiplier
                                float64{50000}
   CFICode
                                string{MXXXXX}
                                string{TradeAtSettlement}
   SecuritySubType
   ProductComplex
                                string{CT
                                             20140221}
   InternalCreationDate
                                Timestamp{2013-07-03 09:11:07:520}
   InternalModificationDate
                                Timestamp{2013-07-08 11:32:50:054}
   InternalSourceId
                                uint16{40}
   LocalCodeStr
                                string{820735}
   PriceIncrement_static
                                float64{0.01}
   MaturityYear
                                uint16{2014}
   MaturityMonth
                                uint8{2}
   MaturityDay
                                uint8{21}
   MARKET_ICE_ContractSymbol
                                string{CT FMH0014_Z}
```

## 1.2.2. Index

The sample below illustrates the details of an index:

```
instr # 507/775439 = 1064031503
   PriceCurrency
                                string{USD}
   Symbol 3
                                string{RUSS}
   Description
                                string{Russell Top 200 - Index - Cash}
   SecurityType
                                string{INDEX}
   StdMaturity
                                string{201307}
   FOSMarketId
                                ICUS
   CFICode
                                string{MRIXXX}
   SecuritySubType
                                string{Index}
   ProductComplex
                                string{RUSS 20130715}
   InternalCreationDate
                                Timestamp{2013-07-15 12:11:18:421}
   InternalModificationDate
                                Timestamp{2013-07-15 13:21:52:743}
   InternalSourceId
                                uint16{40}
   LocalCodeStr
                                string{1280027}
   PriceIncrement_static
                                float64{0.01}
   MaturityYear
                                uint16{2013}
   MaturityMonth
                                uint8{7}
   MaturityDay
                                uint8{15}
                                string{RUSSFDN1513_IRQH}
   MARKET_ICE_ContractSymbol
```

## 1.2.3. Multilegs

The sample below illustrates the details of a multileg:

```
instr # 507/753471 = 1064009535
   SecurityType
                                string{MLEG}
   FOSMarketId
                                ICUS
   CFICode
                                string{MRXXXX}
   InternalCreationDate
                                Timestamp{2013-07-08 13:31:16:279}
   InternalModificationDate
                                Timestamp{2013-07-08 13:31:16:279}
   InternalSourceId
                                uint16{40}
   LocalCodeStr
                                string{90724151}
   PriceIncrement_static
                                float64{0.01}
   UnderlyingFOSMarketId
                                ICUS
   UnderlyingLocalCodeStr
                                string{800539}
   UnderlyingFOSInstrumentCode uint32{1064006178}
   LegRatioQty
                                float64{1}
                                float64{1}
   LegRatioQty_1
                                '1'=Buy
   LegFIXSide
   LegFIXSide_1
                                '1'=Buy
   MARKET_ICE_ContractSymbol
                                string{}
```

## 1.2.4. Options/Futures Trade at Settlement

The sample below illustrates the details of an option/future trade at settlement:

```
instr # 507/774775 = 1064030839
   PriceCurrency
                                 string{USD}
   Symbol 3
                                 string{KEO}
   Description
                                 string{EUR/USD 125 TAS - NYCC - Sep13}
                                 string{FUT}
   SecurityType
   StdMaturity
                                 string{201309}
   FOSMarketId
                                 ICUS
                                 float64{125000}
   Factor
   ContractMultiplier
                                 float64{125000}
                                 \texttt{string}\{\texttt{MXXXXX}\}
   CFICode
   SecuritySubType
                                 string{TradeAtSettlement}
   ProductComplex
                                 string{KEO 20130916}
   InternalCreationDate
                                 Timestamp{2013-07-15 12:11:18:085}
   InternalModificationDate
                                Timestamp{2013-07-15 13:21:52:409}
   InternalSourceId
                                 uint16{40}
   LocalCodeStr
                                 string{2072329}
   PriceIncrement_static
                                 float64{5e-05}
   MaturityYear
                                 uint16{2013}
   MaturityMonth
                                 uint8{9}
                                 uint8{16}
   MaturityDay
   MARKET_ICE_ContractSymbol
                                 string{KEO FMU0013_Z}
```

## **1.2.5. Options**

The sample below illustrates the details of an option:

```
instr \# 432/757456 = 906727120
   PriceCurrency
                               string{USD}
   Symbol
                               string{WBS}
   Description
                               string{WTI Crude Futures - WTI - Sep13}
   SecurityType
                               string{OPT}
   StdMaturity
                               string{201309}
   StrikePrice
                               float64{97.25}
   FOSMarketId
                               ICEU
   CFICode
                               string{OCAXXX}
   SecuritySubType
                               string{Option on Future/Month}
                               string{WBS 20130815C00097250}
   ProductComplex
   InternalCreationDate
                               Timestamp{2013-07-08 12:58:25:202}
   InternalModificationDate
                               Timestamp{2013-07-08 12:58:25:202}
   InternalSourceId
                               uint16{188}
   LocalCodeStr
                               string{90942384}
   PriceIncrement_static
                               float64{0.01}
   UnderlyingFOSMarketId
                               ICEU
   UnderlyingLocalCodeStr
                               string{461133}
   UnderlyingFOSInstrumentCode uint32{906723363}
   MaturityYear
                               uint16{2013}
   MaturityMonth
                               uint8{8}
   MaturityDay
                               uint8{15}
                               string{WBS FMU0013_OMCA0000097252081513}
   MARKET_ICE_ContractSymbol
```

## 1.3. Specific Referential Tags

The following sections describe additional, specific referential tags available on ICE market data stream:

• 1.3.1. Contract Symbol

## 1.3.1. Contract Symbol

The referential tag **Contract Symbol** is disseminated via S&P Capital IQ's Real-Time Solutions's market data stream in *Referential* to detail the symbol of the security.

Caution	Please note that in the current version of the ICE feed handler, the data disseminated via the tag LocalCodeStr is the ICE trading code sent directly by the market. In the previous version of the feed, these values were disseminated via the tag InternalMagic_0.
	Moreover, the values previously disseminated via the tag LocalCodeStore are now broadcast over the tag MARKET_ICE_ContractSymbol, which is a market-specific tag. In the previous version of the feed, S&P Capital IQ's Real-Time Solutions replaced all spaces to underscores (_) and removed all exclamation marks (!).
	Currently, the data disseminated via the tag MARKET_ICE_ContractSymbol is no longer altered by S&P Capital IQ's Real-Time Solutions.

QuantFEED\*'s implementation of the tag MARKET\_ICE\_ContractSymbol is described in the following table:

Table 2 MARKET\_ICE\_ContractSymbol – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_ICE_ContractSymbol	QuantFEED® tag name.
Numeric ID	11600	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	String	Strings data type.
Format / Possible Values	[Exchange Specific Value]	An <b>exchange specific value</b> , detailing the symbol of the security.

## 2. Quotation Data

The following sections describe the characteristics of the quotation data on ICE market data stream, in terms of:

- 2.1. Quotation Values
- 2.2. Trading Status
- 2.3. Specific Quotation Tags.

## 2.1. Quotation Values

The example below shows the possible values of an instrument on ICE market data stream:

```
InstrumentStatusL1
-- 432/750228
       BID: 60.3
                        10
       ASK: 60.5
                        50
       LastPrice
                                        float64{60.3}
       LastTradeQty
                                        float64{10}
                                        float64{60.3}
       DailyHighPrice
       DailyLowPrice
                                        float64{59.9}
       DailyTotalVolumeTraded
                                        float64{90}
       DailyTotalAssetTraded
                                        float64{5403.7}
       LastTradePrice
                                        float64{60.3}
       LastTradeTimestamp
                                        Timestamp{2012-08-09 13:44:43:486}
       InternalDailyOpenTimestamp
                                        Timestamp{2012-08-09 08:26:25:916}
       InternalDailyCloseTimestamp
                                        Timestamp{2012-08-08 23:00:00:997}
       InternalDailyHighTimestamp
                                        Timestamp{2012-08-09 13:44:43:487}
       InternalDailyLowTimestamp
                                        Timestamp{2012-08-09 08:26:25:916}
       InternalPriceActivityTimestamp
                                        Timestamp{2012-08-09 14:08:00:532}
       TradingStatus
                                        17=ReadyToTrade
       LastOffBookTradePrice
                                        float64{57.85}
       LastOffBookTradeQty
                                        float64{25}
       LastOffBookTradeTimestamp
                                        Timestamp{2012-07-17 13:25:07}
        SessionVWAPPrice
                                        float64{60.025}
       DailyOpeningPrice
                                        float64{59.9}
       PreviousDailyTotalVolumeTraded float64{260}
       PreviousDailyTotalAssetTraded
                                        float64{15631.9}
       PreviousDailyClosingPrice
                                        float64{60.3}
       PreviousBusinessDay
                                        Timestamp{2012-08-08}
        CurrentBusinessDay
                                        Timestamp{2012-08-09}
        PreviousDailySettlementPrice
                                        float64{60.258}
        LastAuctionPrice
                                        float64{60.27}
       DailyTotalOffBookVolumeTraded
                                        float64{0}
       DailyTotalOffBookAssetTraded
                                        float64{0}
        OpenInterest
                                        float64{3.21}
        InternalLastAuctionTimestamp
                                        Timestamp{2012-08-09 06:00:00:036}
       MARKET_ICE_BlockVolume
                                        float64{25}
       MARKET_ICE_EFPVolume
                                        float64{100}
```

For more details about the fields and tags available in quotation data type, and their possible values, see  $FeedOS^{T}$  Quotation Tags Guide.

## 2.2. Trading Status

Each time a modification of the trading status occurs, the values of the quotation tag **Trading Status** conveyed on the ICE market data stream are disseminated via QuantFEED®'s data stream in *Other Values*:

- 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\*'s implementation of the tag TradingStatus is described in the following table:

Table 3 TradingStatus – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	TradingStatus	QuantFEED® tag name.
Numeric ID	9100	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Enum	Enum data type.
Format	[Exchange Specific Value]	An <b>exchange specific value</b> , detailing the characteristics of the trading status.
	2	Trading Halt
Possible Values	5	Price Indication
	17	Ready to Trade
	21	Pre-Open

## 2.3. Specific Quotation Tags

The following sections describe additional, specific quotation tags available on ICE market data stream:

- 2.3.1. Trade Conditions
- 2.3.2. Other Specific Values.

### 2.3.1. Trade Conditions

The following subsections describe the trade conditions on ICE market data stream:

- 2.3.1.1. Aggressor Side
- 2.3.1.2. Block Trade Type
- 2.3.1.3. System Priced Leg Type.

### 2.3.1.1. Aggressor Side

The values of the quotation tags **Aggressor Side** conveyed on the ICE market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Context* to specify if the aggressor is a buyer or a seller:

- 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 AggressorSide is described in the table below:

Table 4 AggressorSide – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	AggressorSide	QuantFEED® tag name.
Numeric ID	9356	QuantFEED® unique ID broadcast on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Char	Char data type.
Format	[Exchange Specific Value]	An <b>exchange specific value</b> , identifying the side of the aggressor.
	Space	No aggressor
Possible Values	1	Buy Side
	2	Sell Side

## 2.3.1.2. Block Trade Type

Each time a block trade occurs, the values of the quotation tags **Block Trade Type** conveyed on the ICE market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Context*:

- 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 MARKET\_ICE\_BlockTradeType is described in the table below. Please note that all the trades having a trade condition are flagged as off-book trades:

Table 5 MARKET\_ICE\_BlockTradeType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_ICE_BlockTradeType	QuantFEED® tag name.
Numeric ID	15501	QuantFEED® unique ID broadcast on S&P Capital IQ's Real-Time Solutions's 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> , detailing the characteristics of a block trade.
	К	Block Trade
	E	EFP Trade
	S	EFS Trade
Possible Values	V	Bilateral O-Exchange Trade
	0	NG EFP/EFS Trade
	9	CCX EFP Trade
	J	EFR Trade

### 2.3.1.3. System Priced Leg Type

A **System Priced Leg** is the result of a trade in the outright spread. The underlying leg markets spread trades display the last price. Additionally, this outright spread trade is not attributed to any derived legs into or out of the spread.

Caution Do not include the outright trades in the high/low/close prices, as they are flagged as off-book trades.

Thus, each time a trade in the outright spread occurs, the values of the quotation tags **System Priced Leg Type** conveyed on the ICE market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Context*:

- 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.

 $Quant FEED ^* implementation of the tag \verb| MARKET_ICE_SystemPricedLegType| is described in the table below:$ 

Table 6 MARKET\_ICE\_SystemPricedLegType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_ICE_SystemPricedLegType	QuantFEED® tag name.
Numeric ID	15502	QuantFEED® unique ID broadcast on S&P Capital IQ's Real-Time Solutions's 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> , detailing the type of system priced leg.
Possible Values	С	System Priced Crack Spread Leg
	S	System Priced Leg

## 2.3.2. Other Specific Values

The following subsections detail other specific quotation tags available on ICE market data stream:

- 2.3.2.1. Block Volume
- 2.3.2.2. EFS Volume
- 2.3.2.3. EFP Volume
- 2.3.2.4. Interval Price Limits on Hold.

#### 2.3.2.1. Block Volume

Each time a block trade occurs, the values of the quotation tag **Block Volume** conveyed on the ICE market data stream are disseminated via QuantFEED\*'s data stream in *Other Values*:

- in the callback carrying the Level1 event notif\_TradeEventExt(), for C++
- in the event handler  $\mathsf{TradeEventExtEventHandler}$ , for C#
- in the callback carrying the Levell event quotNotifTradeEventExt, for Java.

QuantFEED\*'s implementation of the tag MARKET\_ICE\_BlockVolume is described in the following table:

Table 7 MARKET\_ICE\_BlockVolume – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_ICE_BlockVolume	QuantFEED® tag name.
Numeric ID	14500	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Float64	Float64 data type.
Format / Possible Values	[Exchange Specific Value]	An <b>exchange specific value</b> , detailing the volume of a block trade.

### 2.3.2.2. EFS Volume

Each time a swap exchange occurs, the values of the quotation tag **EFS Volume** conveyed on the ICE market data stream are disseminated via QuantFEED®'s data stream in *Other Values*:

- 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\*'s implementation of the tag MARKET\_ICE\_EFSVolume is described in the following table:

Table 8 MARKET\_ICE\_EFSVolume – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_ICE_EFSVolume	QuantFEED® tag name.
Numeric ID	14501	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Float64	Float64 data type.
Format / Possible Values	[Exchange Specific Value]	An <b>exchange specific value</b> , detailing the volume of the exchanged swaps.

#### 2.3.2.3. **EFP Volume**

Each time a physical exchange occurs, the values of the quotation tag **EFP Volume** conveyed on the ICE market data stream are disseminated via QuantFEED®'s data stream in *Other Values*:

- 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\*'s implementation of the tag MARKET\_ICE\_EFPVolume is described in the following table:

Table 9 MARKET\_ICE\_EFPVolume – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_ICE_EFPVolume	QuantFEED® tag name.
Numeric ID	14502	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Float64	Float64 data type.
Format / Possible Values	[Exchange Specific Value]	An <b>exchange specific value</b> , detailing the volume of the exchanged physicals.

#### 2.3.2.4. Interval Price Limits on Hold

**Interval Price Limits (IPL)** purpose is to avoid sudden movements (in both directions) in the market during a short period of time. If IPL is violated, a *Hold period* is instituted to prevent prices outside of IPL range. Subsequent IPL notifications are sent out to market participants about this period (*IPL Hold Start – IPL Hold End*).

Thus, each time the price limits are exceeded, the values of the quotation tag **Interval Price Limits on Hold** conveyed on the ICE market data stream are disseminated via QuantFEED®'s data stream in *Other Values*:

- 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\*'s implementation of the tag MARKET\_ICE\_IntervalPriceLimitsOnHold is described in the following table:

Table 10 MARKET\_ICE\_IntervalPriceLimitsOnHold – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_ICE_IntervalPriceLimitsOn Hold	QuantFEED® tag name.
Numeric ID	14503	QuantFEED® unique ID disseminated on S&P Capital IQ's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Туре	Bool	Boolean data type.
Format	[Exchange Specific Value]	An <b>exchange specific value</b> , specifying if a Hold period is instituted, following an IPL violation.
	Space / Empty	Under normal trading circumstances, there are no values.
Possible Values	True	Interval Price Limit was violated and a Hold period is instituted.
	Reset	Interval Price Limit is no longer on Hold.

## 3. Special Behavior

S&P Capital IQ's Real-Time Solutions merge the implied prices/quantities provided by the Intercontinental Exchange with the outright prices/quantity.

# 4. Official Closing Price

The closing price is the last trade price upon close. The settlement price is handled when provided by the market.

# 5. Finding the Latest Information

For the latest documentation and product updates, additional support and training, please contact our support services one of the following ways:

- E-mail: support@quanthouse.com
- Web: http://support.quanthouse.com.