# **QuantFEED® Developer's Notice**

**CTA – Feed Update** 

Reference n°: 20140307

Effective as of: 17 March 2014

Action required from users: Mandatory Action



S&P Capital IQ Real-Time Solutions (QuantHouse\*) – QuantFEED\* QuantFEED\* Developer's Notice Reference 20140307 March 07, 2014

#### **Corporate Headquarters**

S&P Capital IQ Real-Time Solutions (QuantHouse\*)
52 Rue de la Victoire
75009 Paris
France
Tal. 123 (0) 1 73 03 33 11

Tel: +33 (0) 1 73 02 32 11 Fax: +33 (0) 1 73 02 32 12

#### **US Offices**

55 Water Street, 44th floor New York, NY 10041 United States of America Tel: +1-(212)-438-4346

**UK Office** 

20 Canada Square Canary Wharf London E14 5LH United Kingdom Tel: +44 (0) 203 107 1676

www.quanthouse.com

130 East Randolph One Prudential Plaza, Suite 2900 Chicago, IL 60601 United States of America Tel: +1-(312)-233-7129

Singapore Office

12 Marina Boulevard #23-01 Marina Bay Financial Centre Tower 3 Singapore 018982 Tel: +65 6530 6546

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# UPDATE OF THE CTA MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the CTA 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. Functional Description
- 3. QuantFEED® Technical Implementation
- 4. Finding the Latest Information.

# 1. Update Summary

Table 1 Current update summary

Notice Reference	20140307	
Exchanges	CTA	
Concerned MICs	ARCX, BATS, BATY, CBSX, EDGA, EDGX, XADF, XASE, XBOS, XCHI, XCIS, Xcta, XISX, XNAS, XNYS, XPHL	
Internal Source ID	119, 121, 122	
Effective Date	fective Date 2014-03-17	
<ul> <li>Update of the Referential Tags</li> <li>Update of the Quotation Tags</li> <li>Update of the CLOSE Kinematics</li> </ul>		
Action required	Mandatory Action	

## 2. Functional Description

Effective Monday, March 17, 2014, S&P Capital IQ Real-Time Solutions enhances the content of the referential, quotation data and the CLOSE Kinematics to accommodate the new information disseminated on the CTA market data stream, as described below:

- 2.1. Changes to Referential Data
- 2.2. Changes to Quotation Data.

## 2.1. Changes to Referential Data

S&P Capital IQ Real-Time Solutions **introduces** the referential tag below to accommodate the information broadcast on the CTA market data stream:

Table 2 Referential tags added on the CTA market data stream

Tag Name	Numeric ID	Туре
InternalEntitlementId	9405	int32

Below is an example of the new referential tags implementation (in green):

instr # 336/1111 = 704644183 PriceCurrency string{USD} Symbol string{RBS} string{The Royal Bank of Scotland Group plc American Description Depositary Shares, (Each representing 2 ordinary shares)} string{NONE} SecurityType FOSMarketId **XNYS** CFICode string{EXXXXX} RoundLot float64{100} InternalCreationDate Timestamp{2013-12-09 16:26:37:268} InternalModificationDate Timestamp{2014-02-27 07:10:02:655} InternalSourceId uint16{119} InternalEntitlementId int32{1029} LocalCodeStr string{RBS} ForeignFOSMarketId **XNYS** CUSIP string{780097689} OperatingMIC string{XNYS}

## 2.2. Changes to Quotation Data

S&P Capital IQ Real-Time Solutions **introduces** the quotation tag below to accommodate the information broadcast on the CTA market data stream:

Table 3 Quotation tags added on the CTA market data stream

Tag Name	Numeric ID	Туре
InternalDailyClosingPriceType	9155	Char

Below is an example of the new quotation tags implementation (in green):

```
InstrumentStatusL1
-- 336/1111
        BID: 10.77
       ASK: 10.78
                                        float64{10.78}
       LastPrice
                                        float64{100}
       LastTradeQty
       DailyHighPrice
                                        float64{10.93}
       DailyLowPrice
                                        float64{10.756}
       DailyTotalVolumeTraded
                                        float64{153115}
       DailyTotalAssetTraded
                                        float64{1664211.04}
       LastTradePrice
                                        float64{10.78}
                                        Timestamp{2014-03-27 15:26:19:613}
       LastTradeTimestamp
       InternalDailyOpenTimestamp
                                        Timestamp{2014-03-27 14:30:00:496}
       InternalDailyCloseTimestamp
                                        Timestamp{2014-03-26 21:00:00:027}
       InternalDailyHighTimestamp
                                        Timestamp{2014-03-27 14:35:27:227}
                                        Timestamp{2014-03-27 15:23:53:599}
       InternalDailyLowTimestamp
                                        Timestamp{2014-03-27 15:26:35:482}
       InternalPriceActivityTimestamp
       TradingStatus
                                        17=ReadyToTrade
       DailyOpeningPrice
                                        float64{10.87}
       PreviousDailyTotalVolumeTraded float64{172355}
        PreviousDailyTotalAssetTraded
                                        float64{2031125.43}
        PreviousDailyClosingPrice
                                        float64{11.73}
        PreviousBusinessDay
                                        Timestamp{2014-03-26}
                                        Timestamp{2014-03-27}
       CurrentBusinessDay
       InternalDailyClosingPriceType
                                        {a}
        LimitUpLimitDownIndicator
        PriceActivityMarketTimestamp
                                        Timestamp{2014-03-27 15:26:35:482}
```

# 3. QuantFEED® Technical Implementation

The following sections describe the technical implementation of the new or updated tags:

- 3.1. Internal Entitlement ID
- 3.2. Internal Daily Closing Price Type
- 3.3. CTA CLOSE Kinematics Update.

## 3.1. Internal Entitlement ID

The values of the referential tag **Internal Entitlement ID** conveyed on the CTA market data stream are disseminated via QuantFEED\* data stream in *Referential* to internally identify specific use permissions.

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

Table 4 InternalEntitlementId – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	InternalEntitlementId	QuantFEED® tag name.
Numeric ID	9405	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Int32	Int32 data type.
Format	[Internal Specific Value]	An <i>internal specific value</i> , identifying particular use permissions on CTA.
Possible Values	1029	CTA - CTA Group A - NYSE
rossible values	1030	CTB - CTA Group B - AMEX

## 3.2. Internal Daily Closing Price Type

The values of the quotation tag **Internal Daily Closing Price Type** conveyed on the CTA market data stream are disseminated via QuantFEED\* data stream in *Other Values* to indicate the type of the internal daily closing 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 values currently available for the tag InternalDailyClosingPriceType is described in the table below (currently disseminated values are in green):

Table 5 InternalDailyClosingPriceType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	InternalDailyClosingPriceType	QuantFEED® tag name.
Numeric ID	9155	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	Char	Char data type.
Format	[Internal Specific Value]	An <i>internal specific value</i> , detailing the type of daily closing price.

Table 5	InternalDailyClosingPriceType – technical implementation in QuantFEED® (Continued)
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Component	Value	Description
	0	Undefined
	a	Official Close – Explicit closing price value calculated and distributed by an exchange for the main trading session of a given trading day.
	b	Official Indicative – Exchange has provided an indicative price and marked it as indicative, however no trading activity is observed.
Possible Values	С	Official Carry Over – Explicit Closing price value from a previous trading day carried forward by the exchange to the given trading day.
	d	Last Price – Final price disseminated by the exchange for the main trading session or dissemination period of a given trading day (for indices).
	е	Last Eligible Price – Execution price of the final trade (subject to trade qualifiers) accepted by the exchange for the main trading session of a given trading day.
	z	<b>Manual</b> – Price disseminated manually (in case of production correction).

## 3.3. CTA CLOSE Kinematics Update

In the CLOSE kinematics before 2014-03-17, each exchange was sending the CLOSE signal at a different hour, between 16:00 and 20:15 (New York Time). Afterwards, the instruments were no longer traded, as shown in the example below:

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"
"VU (ValuesUpdate) : SERVER_TIME INSTRUMENT VALUES..."
"SI (TradeEvent) *SIGNAL* : SERVER_TIME INSTRUMENT SIGNAL LAST_PRICE"
TE 20:54:49:671 73402754
                                        19.67
                                                1
TE 20:54:49:672 73402754 *
                                                       20.59
                                                               1
TE 20:54:49:672 73402754 *
                                                               *
                                        20.01
                                                2
TE 20:54:49:672 73402754 *
                                                *
                                                       20.27
                                                               2
                                *
TE 20:55:03:590 73402754 *
                                       19.68 1
TE 20:55:03:590 73402754 *
                                                       20.58
                                                               1
TE 20:58:34:449 73402754 *
                                       19.67 1
                                                       20.59
                                                               1
TE 20:59:59:225 73402754 *
                                        18.88 1
                                                       21.31
                                                               1
TE 21:00:06:171 73402754 *
                                                0
                                        !
                                                               0
TE 21:00:06:171 73402754
                                         !
                                                0
SI 21:15:05:494 73402754
                         CLOSE
                                 19.83
                                                *
                                                               *
TE 21:15:05:494 73402754
                         19.83
                                                                      C
TE 21:45:00:576 73402754
                                         !
                                                0
                                                               0
VU 22:45:00:390 73402754
                         TradingStatus=18
VU 23:40:05:231 73402754
                         DailyOpeningPrice=19.83
```

In the CLOSE kinematics after 2014-03-17, the CLOSE signal is sent for all the markets no later than 16:01 (New York Time). However, the instruments continue to trade until the closing time of each market, as shown in the example below:

```
"TE (TradeEvent) : MARKET_TIME INSTRUMENT LAST_PRICE TRADE_QTY BID_PRICE BID_QTY ASK_PRICE
ASK_QTY *CONTENT_MASK* *FLAGS*"
"VU (ValuesUpdate) : SERVER_TIME INSTRUMENT VALUES..."
"SI (TradeEvent) *SIGNAL* : SERVER_TIME INSTRUMENT SIGNAL LAST_PRICE"
20.59 1
                                                        *
                                                20.27
                                                        2
                                                20.58
                                                20.59
                                                        1
                                                 20.57
                                                 21.31 1
SI 21:01:00:265 73402754 CLOSE 19.83
TE 21:01:00:265 73402754 19.83 *
                                                               C
VU 21:01:00:265 73402754 InternalDailyClosingPriceType=e
VU 21:15:05:494 73402754 InternalDailyClosingPriceType=a DailyOpeningPrice=19.83
TE 21:45:00:576 73402754 * * !
                                          0
                                                !
VU 22:45:00:004 73402754 TradingStatus=18
```

# 4. 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.