S&P Capital IQ Real-Time Solutions

QuantFEED® Developer's Notice

CHIX EUROPE – Feed Update

Reference n°: 20140319

Effective as of: 28 March 2014

Action required from users: Attention Required (Optional)



S&P Capital IQ Real-Time Solutions (QuantHouse*) – QuantFEED* QuantFEED* Developer's Notice Reference 20140319 March 19, 2014

Corporate Headquarters

S&P Capital IQ Real-Time Solutions (QuantHouse*)
52 Rue de la Victoire
75009 Paris
France
Tale + 23 (0) 1 73 02 32 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

Disclaimer for Technical Documents

QuantHouse* S.A.S. endeavors to include accurate and current information in its materials. However, QuantHouse* does not warrant the accuracy or completeness of the information contained herein. QuantHouse* may change such information at any time, but makes no commitment to update it.

References by QuantHouse* to products offered by third-parties do not constitute an endorsement by QuantHouse* of such products and should not be construed as an association with their owners.

YOUR USE OF THE INFORMATION HEREIN IS AT YOUR OWN RISK. SUCH INFORMATION IS PROVIDED ON AN "AS IS" BASIS. QUANTHOUSE" S.A.S. MAKES NO REPRESENTATION, UNDERTAKES NO OBLIGATION, AND PROVIDES NO WARRANTY OF ANY KIND WITH RESPECT TO THE INFORMATION CONTAINED HEREIN, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. IF YOU CHOOSE TO USE SUCH INFORMATION, YOU ARE ACKNOWLEDGING THAT YOU HAVE READ THIS DISCLAIMER, UNDERSTAND IT, AGREE TO ABIDE BY, AND BE BOUND BY, ITS PROVISIONS.

Use of the Information

The information constitutes proprietary material and is either owned by or licensed to QuantHouse*. Further, it is protected by intellectual property rights. No information may be used, reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise) or for any purpose, except as licensed expressly by QuantHouse* S.A.S.

Trademarks

QUANTHOUSE*, the QuantHouse* logo and product names are trademarks of QuantHouse* S.A.S. and QuantHouse* S.A.S. reserves all intellectual property rights with respect to the trademarks. All other trademarks are the trademarks of their respective owners.

Copyright

© Copyright 2004-2014 QuantHouse* S.A.S. All rights reserved.



UPDATE OF THE CHIX EUROPE MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the CHIX EUROPE 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	20140319
Exchanges	CHIX EUROPE
Concerned MICs	CHIX
Internal Source ID	34
Effective Date	2014-03-28
Impact	Update of the Quotation Tags Update of the Quotation Context Tags
Action required	Mandatory Action

2. Functional Description

Effective Friday, March 28, 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 CHIX EUROPE market data stream, as described below:

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

2.1. Changes to Quotation Data

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

Table 2 Quotation tags added on the CHIX EUROPE market data stream

Tag Name	Numeric ID	Туре
InternalDailyClosingPriceType	9155	Char

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

```
InstrumentStatusL1
-- 366/760063
       BID: 0.7525
                        6793
                                @1
       ASK: 0.801
                        9903
                                @1
        LastPrice
                                        float64{0.76}
        LastTradeQty
                                        float64{14768}
                                        float64{0}
       DailyTotalVolumeTraded
       DailyTotalAssetTraded
                                        float64{0}
       LastTradePrice
                                        float64{0.76}
       LastTradeTimestamp
                                        Timestamp{2014-04-07 11:58:18:964}
        InternalDailyOpenTimestamp
                                        Timestamp{2014-04-10 08:00:00:006}
       InternalDailyCloseTimestamp
                                        Timestamp{2014-04-07 16:30:00:001}
       InternalDailyHighTimestamp
                                        Timestamp{2014-04-07 11:58:18:964}
       InternalDailyLowTimestamp
                                        Timestamp{2014-04-07 11:58:18:964}
       InternalPriceActivityTimestamp
                                        Timestamp{2014-04-10 09:56:12:043}
       TradingStatus
                                        17=ReadyToTrade
        LastOffBookTradePrice
                                        float64{0.695}
        LastOffBookTradeQty
                                        float64{2638}
        LastOffBookTradeTimestamp
                                        Timestamp{2013-11-05 14:39:13:296}
        PreviousDailyTotalVolumeTraded float64{14768}
        PreviousDailyTotalAssetTraded
                                        float64{11223.68}
        PreviousDailyClosingPrice
                                        float64{0.76}
        PreviousBusinessDay
                                        Timestamp{2014-04-07}
        CurrentBusinessDay
                                        Timestamp{2014-04-10}
        InternalDailyClosingPriceType
                                        char{a}
        DailyTotalOffBookVolumeTraded
                                        float64{0}
        DailyTotalOffBookAssetTraded
                                        float64{0}
```

2.2. Changes to Quotation Context Data

S&P Capital IQ Real-Time Solutions no longer disseminates the quotation context tag below on Off Order Book Trades, but only on On Order Book Trades to accommodate the information broadcast on the CHIX EUROPE market data stream:

Table 3 Quotation context tags removed from the CHIX EUROPE market data stream – Off Book Trades

Tag Name	Numeric ID	Туре
MARKET_CHIX_ExecutionType	16300	String

Below is an example showing the removed quotation context tags (in crossed out red):

```
"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 09:51:11:845.177 366/751089 17.04
TE 09:51:11:819.651 366/756589 *
                                                               6.66
                                                                      100@1
TE 09:51:11:845.245 366/757179 15.02 75000 *
TradeID=000E998004P6, MARKET_CHIX_ExecutionType=E
TE 09:51:11:845.308 366/757179 * * * *
TE 09:51:11:845.348 366/757179 15.03 100 *
                                                              15.03 100@1
                                                              15.04 100@1
TradeID=0001998004P7,AggressorSide='1'=Buy
TE 09:51:11:845.450 366/751089 * * 16.97 100@1 *
TE 09:51:11:845.757 366/751089 *
                                                              17.06 100@1
```

3. QuantFEED® Technical Implementation

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

- 3.1. InternalDailyClosingPriceType
- 3.2. MARKET_CHIX_ExecutionType.

3.1. Internal Daily Closing Price Type

The values of the quotation tag **Internal Daily Closing Price Type** conveyed on the CHIX EUROPE 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 4 Internal Daily Closing Price Type – technical implementation in Quant FEED®

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 4 InternalDailyClosingPriceType – technical implementation in QuantFEED® (Continued)

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	Manual – Price disseminated manually (in case of production correction).

3.2. MARKET_CHIX_ExecutionType

Each time an execution occurs, the values of the quotation tag **MARKET CHIX Execution Type** conveyed on the CHIX EUROPE market data stream are disseminated via QuantFEED* data stream in *Context*, for On Book Trades only:

- 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 MARKET_CHIX_ExecutionType is described in the table below:

Table 5 MARKET_CHIX_ExecutionType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_CHIX_ExecutionType	QuantFEED® tag name.
Numeric ID	16300	QuantFEED® unique ID broadcast on S&P Capital IQ Real-Time Solutions data stream. It is the numeric equivalent of the tag name.
Туре	String	String data type.
Format	[Exchange Specific Value]	An exchange specific value , as described below, specifying the characteristics of the execution type.
	1 (Default value, not sent)	Chi-X Europe Integrated Book
Possible Values	E	Chi-X Europe Chi-Delta Dark Pool Execution
	R	Negotiated Transaction

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.