

S&P Capital IQ Real-Time Solutions

QuantFEED® Developer's Notice

BATS EUROPE – Feed Update

Reference n°: 20140328 – Update 01

Effective as of: **28 March 2014**

Action required from users: **MANDATORY ACTION**



S&P Capital IQ Real-Time Solutions (QuantHouse®) – QuantFEED®
QuantFEED® Developer's Notice
Reference 20140328
March 28, 2014

Corporate Headquarters

S&P Capital IQ Real-Time Solutions (QuantHouse®)
52 Rue de la Victoire
75009 Paris
France
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

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

UK Office

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

Singapore Office

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

www.quanthouse.com

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 BATS EUROPE MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the BATS 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	20140328 – Update 01
Exchanges	BATS EUROPE
Concerned MICs	BATE
Internal Source ID	20
Effective Date	2014-03-28
Impact	<ul style="list-style-type: none">• Update of the Referential Tags• 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 quotation and quotation context data to accommodate the new information disseminated on the BATS EUROPE market data stream, as described below:

* The red bars highlight content that has been added or changed since the previous release of this document.

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

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 broadcast on the BATS EUROPE market data stream:

Table 2 Referential tags disseminating updated values on the BATS EUROPE market data stream

Tag Name	Numeric ID	Type
SecurityType	167	String
CFICode	461	String

Caution Although the [SecurityType](#) and the [CFICode](#) change, the [LocalCodeStr](#), the [FOSMarketId](#) and the [Instrument Internal Code](#) remain the same.

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

```
instr # 448/750005 = 940274101
  PriceCurrency      string{EUR}
  Symbol             string{AB1d}
  Description         string{Air Berlin PLC}
  MaxFloor           float64{50000}
  SecurityType       string{CS}
  FOSMarketId        BATE
  CFICode           string{ESXXXX}
  SecurityGroup      string{7}
  InternalCreationDate Timestamp{2013-04-22 06:01:22:736}
  InternalModificationDate Timestamp{2014-03-28 05:50:06:815}
  InternalSourceId   uint16{20}
  LocalCodeStr       string{AB1d}
  ForeignFOSMarketId XETR
  ForeignMarketId    string{XETR}
  ISIN               string{GB00B128C026}
  ReutersInstrumentCode string{AB1d.BS}
  PriceIncrement_dynamic_TableId uint32{1310828}
  PrimaryReutersInstrumentCode string{AB1.DE}
  UMTF               string{AB1d}
  OperatingMIC        string{BCXE}
  SegmentMIC          string{BATE}
```

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 BATS EUROPE market data stream:

Table 3 Quotation tags added on the BATS EUROPE market data stream

Tag Name	Numeric ID	Type
InternalDailyClosingPriceType	9155	Char

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

```
InstrumentStatusL1
-- 448/750005
    BID: 1.999      4146    @1
    ASK: 2.107      6399    @1
    LastPrice                float64{2.053}
    LastTradeQty             float64{1033}
    DailyTotalVolumeTraded   float64{0}
    DailyTotalAssetTraded    float64{0}
    LastTradePrice           float64{2.053}
    LastTradeTimestamp       Timestamp{2014-04-07 15:45:17:254}
    InternalDailyOpenTimestamp Timestamp{2014-04-11 08:00:00:005}
    InternalDailyCloseTimestamp Timestamp{2014-04-10 16:30:00:001}
    InternalDailyHighTimestamp Timestamp{2014-04-07 11:18:36:233}
    InternalDailyLowTimestamp Timestamp{2014-04-07 15:45:17:255}
    InternalPriceActivityTimestamp Timestamp{2014-04-11 14:43:10:134}
    TradingStatus            17=ReadyToTrade
    LastOffBookTradePrice     float64{1.9835}
    LastOffBookTradeQty       float64{295}
    LastOffBookTradeTimestamp Timestamp{2014-03-03 15:59:57:639}
    PreviousDailyTotalVolumeTraded float64{0}
    PreviousDailyTotalAssetTraded float64{0}
    PreviousDailyClosingPrice float64{2.053}
    PreviousBusinessDay       Timestamp{2014-04-10}
    CurrentBusinessDay        Timestamp{2014-04-11}
    InternalDailyClosingPriceType char{a}
    DailyTotalOffBookVolumeTraded float64{0}
    DailyTotalOffBookAssetTraded float64{0}
```

2.3. 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 BATS EUROPE market data stream:

Table 4 Quotation context tags removed from the BATS EUROPE market data stream – Off Book Trades

Tag Name	Numeric ID	Type
MARKET_BATS_ExecutionType	16150	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 08:00:07:613.131 940274480 1372.865 2 * * * * f
TradeId=26272069743051, MARKET_BATS_ExecutionType=9
TE 08:00:07:616.085 940275573 * * 6.265 100@1 * *
TE 08:00:07:618.582 940274825 * * 480.2 244@1 * *
TE 08:00:07:621.218 940274825 * * 480.3 257@1 * *
TE 08:00:07:625.399 940276806 * * 215.6 248@1 * *
TE 08:00:07:627.032 940274446 * * * * 96.95 31@1
```

3. QuantFEED® Technical Implementation

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

- [3.1. SecurityType](#)
- [3.2. CFICode](#)
- [3.3. InternalDailyClosingPriceType](#)
- [3.4. MARKET_BATS_ExecutionType](#).

3.1. SecurityType

The values of the referential tag **Security Type** conveyed on the BATS EUROPE market data stream are disseminated via QuantFEED® data stream in *Referential* to specify the type of security.

QuantFEED® implementation of the values currently available for the tag securityType is described in the table below (existing values are in black, newly added values are in green):

Table 5 SecurityType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	SecurityType	QuantFEED® tag name.
Numeric ID	167	QuantFEED® unique ID disseminated on 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 type of security.
Possible Values	NONE	Unknown Security Type
	CS	Common Stock
	EUCD	Euro Certificate of Deposit
	MF	Mutual Fund (Exchangeable Traded Fund)

3.2. CFICode

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

QuantFEED® implementation of the values currently available for the tag CFICode is described in the table below (existing values are in black, newly added values are in green):

Table 6 CFICode – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	CFICode	QuantFEED® tag name.
Numeric ID	461	QuantFEED® unique ID disseminated on 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.
Possible Values	ESXXXX	Equities - Shares
	ESXXXXA	Equities - Shares - Registered Depository Receipt
	EUXXXE	Equities - Units - Exchange Traded Funds
	EXXXXX	Equities

3.3. InternalDailyClosingPriceType

The values of the quotation tag **Internal Daily Closing Price Type** conveyed on the BATS 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 Level1 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 7 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.
Type	Char	Char data type.
Format	<i>[Internal Specific Value]</i>	An internal specific value , detailing the type of daily closing price.

Table 7 InternalDailyClosingPriceType – technical implementation in QuantFEED® (Continued)

Component	Value	Description
Possible Values	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.
	c	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).
	e	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).

3.4. MARKET_BATS_ExecutionType

Each time an execution occurs, the values of the quotation tag **MARKET_BATS_Execution Type** conveyed on the BATS 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 Level1 event `quotNotifTradeEventExt`, for Java.

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

Table 8 MARKET_BATS_ExecutionType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_BATS_ExecutionType	QuantFEED® tag name.
Numeric ID	16150	QuantFEED® unique ID broadcast on S&P Capital IQ Real-Time Solutions data stream. It is the numeric equivalent of the tag name.
Type	String	String data type.
Format	<i>[Exchange Specific Value]</i>	An exchange specific value , as described below, specifying the characteristics of the execution type.
Possible Values	0 (Default value not sent)	BATS Integrated Book
	D	D BATS Dark Pool
	C	BATS Closing Cross or Trading at Last
	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>.