QuantFEED® Developer's Notice

CTA – Feed Update

Reference n°: 20131203

Effective as of: 09 December 2013

Action required from users: Attention Required (Optional)

S&P CAPITAL IQ

McGRAW HILL FINANCIAL

S&P Capital IQ's Real-Time Solutions (QuantHouse®) – QuantFEED®
QuantFEED® Developer's Notice
Reference 20131203
December 03, 2013

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UPDATE OF CTA MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on CTA market data stream, S&P Capital IQ's 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

Table 1   Current update summary

Notice Reference	20131203
Exchanges	CTA
Concerned MICs	ARCX, CBSX, EDGA, EDGX, BATY, XASE, XBOS, XCHI, XCIS, XISX, XNAS, XNYS, XPHL, BATS, XADF, Xcta
Internal Source ID	119, 121, 122
Effective Date	**2013-12-09**
Impact	• Update of the Referential Tags • Update of the Quotation Context Tags
Action required	**Attention Required (Optional)**

2. Functional Description

Effective Monday, **December 09, 2013**, S&P Capital IQ's Real-Time Solutions adds new values for the referential tags `CFICode` (**NumericID**: 461, **Type**: `String`) and `SecurityType` (**NumericID**: 167, **Type**: `String`) to accommodate the information disseminated on CTA market data stream.

Moreover, S&P Capital IQ's Real-Time Solutions introduces two new referential tags – OperatingMIC (**NumericID**: 9533, **Type**: String) and SegmentMIC (**NumericID**: 9534, **Type**: String) – to reflect CTA's adoption of the ISO 10383:2012 standard. This new edition of the ISO standard refines the level of granularity on CTA market data stream, by introducing two levels of MIC codes – *operating* (parent-like) and *market segment* (child-like) MICs.

Furthermore, the quotation context tag MARKET_CTA_SaleCondition (**NumericID**: 15700, **Type**: String) will disseminate two new values: **9 – Corrected Consolidated Close (per listing market)** and **I – Odd Lot Trade**.

3. QuantFEED® Technical Implementation

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

- 3.1. CFI Code
- 3.2. Security Type
- 3.3. Operating MIC and Segment MIC
- 3.4. Sale Condition.

3.1. CFI Code

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

QuantFEED®'s implementation of the values currently available for the tag CFICode is described in the table below:

Table 2   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's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Type	String	String data type.
Format	*[Exchange Specific Value]*	An ***exchange specific value***, detailing the standardized identification code of an instrument.
Possible Values	EPXXXX	Equities – Preferred Shares
	EUXXXX	Equities – Units
	EXXXXX	Equities
	RWXXXX	Rights – Warrants
	TIXXXX	Referential Instruments – Indices

3.2. Security Type

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

QuantFEED®'s implementation of the values currently available for the tag `SecurityType` is described in the table below:

Table 3   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's Real-Time Solutions's data stream. This is the numeric equivalent of the tag name.
Type	`String`		String data type.
Format	`[Exchange Specific Value]`		An **exchange specific value**, detailing the type of security.
Possible Values	`NONE`		Unknown Security Type
	`ETF`		Exchange-Traded Fund
	`INDEX`		Index
	`MF`		Mutual Fund
	`PS`		Preferred Stock
	`WAR`		Warrant

3.3. Operating MIC and Segment MIC

The values of the referential tags **Operating MIC** and **Segment MIC** conveyed on the CTA market data stream are disseminated via QuantFEED®'s data stream in *Referential* to specify the parent and child MIC.

QuantFEED®'s implementation of the values currently available for the tag `OperatingMIC` and `SegmentMIC` is described in the table below:

Table 4   OperatingMIC and SegmentMIC – technical implementation in QuantFEED®

Component	Value		Description
Tag Name	`OperatingMIC`	`SegmentMIC`	QuantFEED® tag name.
Numeric ID	`9533`	`9534`	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.
Type	`String`	`String`	String data type.
Format	`[Exchange Specific Value]`	`[Exchange Specific Value]`	An **exchange specific value**, specifying the parent and child MICs.

Table 4   OperatingMIC and SegmentMIC – technical implementation in QuantFEED® (Continued)

Component	Value		Description
	XNYS	XNYS	NEW YORK STOCK EXCHANGE, INC.
	XNYS	ARCX	NYSE ARCA
	XNYS	XASE	NYSE MKT LLC
	BATS	BATS	BATS EXCHANGE
	BATS	BATY	BATS Y-EXCHANGE, INC.
	EDGE	EDGA	EDGA EXCHANGE
	EDGE	EDGX	EDGX EXCHANGE
Possible Values	XNAS	XNAS	NASDAQ – ALL MARKETS
	XNAS	XPHL	NASDAQ OMX PHLX
	XNAS	XBOS	NASDAQ OMX BX
	XCBO	CBSX	CBOE STOCK EXCHANGE
	XCHI	XCHI	CHICAGO STOCK EXCHANGE, INC
	XCIS	XCIS	NATIONAL STOCK EXCHANGE
	FINR	XADF	FINRA ALTERNATIVE DISPLAY FACILITY (ADF)

Below is an example of newly added values of the referential tags:

```
instr # 338/3948 = 708841324
    PriceCurrency            string{USD}
    Symbol                   string{EFV}
    Description              string{iShares MSCI EAFE Value ETF}
    SecurityType             string{ETF}
    FOSMarketId              XPHL
    CFICode                  string{EUXXXX}
    RoundLot                 float64{100}
    InternalCreationDate     Timestamp{2013-12-03 14:35:13:665}
    InternalModificationDate Timestamp{2013-12-03 14:35:13:665}
    InternalSourceId         uint16{42}
    LocalCodeStr             string{EFV}
    ForeignFOSMarketId       ARCX
    OperatingMIC             string{XNAS}
    SegmentMIC               string{XPHL}
```

3.4. Sale Condition

Each time a trade occurs, the values of the quotation tag **Sale Condition** conveyed on the CTA market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Context* to identify a particular condition applicable to the trade:

- 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_CTA_SaleCondition` is described in the table below (newly added or changed values are in **bold**):

Table 5   MARKET_CTA_SaleCondition – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`MARKET_CTA_SaleCondition`	QuantFEED® tag name.
Numeric ID	15700	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.
Type	`String`	String data type.
Format	*[Exchange Specific Value]*	An **exchange specific value**, detailing the particular condition applicable to the trade.
Possible Values	@	Regular Trade (indicates a trade with no associated conditions)
	----	No Sale Condition required within the category it appears (Long Trade format only)
	B	Average Price Trade
	C	Cash Trade (Same Day Clearing)
	E	Automatic Execution
	F	Intermarket Sweep Order
	H	Price Variation Trade
	I	**Odd Lot Trade**
	K	Rule 127 (NYSE only) or Rule 155 (NYSE AMEX only)
	L	Sold Last (Late Reporting)
	M	Market Center Official Close
	N	Next Day Trade (Next Day Clearing)
	O	Market Center Opening Trade
	P	Prior Reference Price
	Q	Market Center Official Open
	R	Seller
	T	Extended Hours Trade
	U	Extended Hours Sold (Out of Sequence)
	V	Stock-Option Trade
	X	Cross Trade
	Z	Sold (Out of Sequence)
	4	Derivatively Priced
	5	Market Center Reopening Trade
	6	Market Center Closing Trade
	7	Reserved
	8	Reserved
	9	**Corrected Consolidated Close (per listing market)**

Below is an example of the current implementation of the updated quotation context tags:

```
14:30:00:004 336/10298 42.01 38873 * * * *
14:30:00:004 336/10298 MARKET_CTA_SaleCondition=---I
14:30:00:005 336/10298 MARKET_CTA_SaleCondition=-9--
```

4. Finding the Latest Information

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

- E-mail: support@quanthouse.com

- Web: http://support.quanthouse.com.