

QuantFEED® Developer's Notice

OTC PINKSHEET – Feed Update

Reference n°: 20140922 – 18922 – 21438

Effective as of: 20 October 2014*

Action required from users: Attention Required



* This is the proposed day for the update of the standard version of the feed handler. For dedicated feed handlers, this date may differ. For the actual day when the changes to your custom feed handler take effect, please contact your QuantFEED® project manager.

S&P Capital IQ Real-Time Solutions (QuantHouse®) – QuantFEED®
QuantFEED® Developer's Notice
Reference 20140922 – 18922 – 21438
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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

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UPDATE OF THE OTC PINKSHEET MARKET DATA STREAM

To reflect the changes caused by the dissemination of new values on the OTC PINKSHEET 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. QuantFEED® Technical Implementation](#)
- [3. Finding the Latest Information.](#)

1. Update Summary

Table 1 Current update summary

| | |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notice Reference | 20140922 – 18922 – 21438 |
| Exchanges | OTC PINKSHEET |
| Concerned MICs | OTCM |
| Internal Source ID | 150 |
| Effective Date | 2014-10-20* |
| 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 | Attention Required |

2. QuantFEED® Technical Implementation

Effective Friday, **October 20^{*}, 2014**, S&P Capital IQ Real-Time Solutions enhances the referential, quotation and quotation context data to accommodate the new information disseminated on the OTC PINKSHEET market data stream, as described below:

- [2.1. Changes to the Referential Data](#)

* This is the proposed day for the update of the standard version of the feed handler. For dedicated feed handlers, this date may differ. For the actual day when the changes to your custom feed handler take effect, please contact your QuantFEED® project manager.

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

2.1. Changes to the Referential Data

S&P Capital IQ Real-Time Solutions **introduces** the referential tags below to accommodate the information disseminated on the OTC PINKSHEET market data stream:

Table 2 Referential tags added on the OTC PINKSHEET market data stream

| Tag Name | Numeric ID | Type |
|---------------|------------|--------|
| PriceCurrency | 15 | String |

Moreover, S&P Capital IQ Real-Time Solutions **updates** the values of the referential tags below:

Table 3 Referential tags disseminating updated values on the OTC PINKSHEET market data stream

| Tag Name | Numeric ID | Type |
|------------|------------|--------|
| SegmentMIC | 9534 | String |

2.1.1. PriceCurrency

The values of the referential tag **PriceCurrency** conveyed on the OTC PINKSHEET market data stream are disseminated via QuantFEED® data stream in *Referential* to specify the currency of the price.

QuantFEED® implementation of the tag PriceCurrency is described in the table below:

Table 4 PriceCurrency – technical implementation in QuantFEED®

| Component | Value | Description |
|-----------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Tag Name | PriceCurrency | QuantFEED® tag name. |
| Numeric ID | 15 | QuantFEED® unique ID disseminated on the 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 , specifying the currency of the price. |
| Possible Values | USD | United States Dollar |

2.1.2. SegmentMIC

The values of the referential tag **SegmentMIC** conveyed on the OTC PINKSHEET market data stream are disseminated via QuantFEED® data stream in *Referential* to specify the child MIC.

QuantFEED® implementation of the tag SegmentMIC is described in the table below (existing values are in black, newly added values are in green, and removed values are in ~~crossed-out-red~~):

Table 5 SegmentMIC – technical implementation in QuantFEED®

| Component | Value | Description |
|-----------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Tag Name | SegmentMIC | QuantFEED® tag name. |
| Numeric ID | 9534 | QuantFEED® unique ID disseminated on the 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 <i>exchange specific value</i> , specifying the child MIC. |
| Possible Values | OTCB | OTCQB |
| | OTCM | OTC Markets – No Tier |
| | OTCQ | OTCQX International OTCQX International Premier OTCQX US OTCQX US Premier |
| | PINC | OTC Pink – Current |
| | PINI | OTC Pink – No Information |
| | PINL | OTC Pink – Limited |
| | PINX | OTC Pink – Current OTC Pink – No Information OTC Pink – Limited |
| | PSGM | OTC Grey Market |
| | XOTC | OTCBB |

Referential Data Sample

Below is an example showing the current implementation of the newly added (in green) and updated (in blue) referential tags:

```
instr # 323/36964 = 677417060
PriceCurrency      string{USD}
Symbol            string{EWSI}
Description        string{E-WASTE SYSTEMS INC}
SecurityType       string{NONE}
FOSMarketId       OTCM
CFICode           string{EXXXXX}
CountryOfIssue     string{US}
InternalCreationDate Timestamp{2014-11-17 04:02:11:650}
InternalModificationDate Timestamp{2014-11-17 04:02:11:651}
InternalSourceId   uint16{51}
InternalEntitlementId int32{1000}
LocalCodeStr       string{EWSI}
OperatingMIC       string{OTCM}
SegmentMIC         string{PINC}
```

2.2. Changes to the Quotation Data

S&P Capital IQ Real-Time Solutions **introduces** the quotation tags below to accommodate the information disseminated on the OTC PINKSHEET market data stream:

Table 6 Quotation tags added on the OTC PINKSHEET market data stream

| Tag Name | Numeric ID | Type |
|--------------------------------------------|------------|------|
| <code>InternalDailyClosingPriceType</code> | 9155 | Char |

Moreover, S&P Capital IQ Real-Time Solutions **updates** the values of the quotation tags below:

Table 7 Quotation tags disseminating updated values on the OTC PINKSHEET market data stream

| Tag Name | Numeric ID | Type |
|------------------------------------------|------------|--------|
| <code>MARKET_PINKSHEET_QuoteFlags</code> | 14960 | UInt16 |

2.2.1. InternalDailyClosingPriceType

The values of the quotation tag **InternalDailyClosingPriceType** conveyed on the OTC PINKSHEET 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 tag `InternalDailyClosingPriceType` is described in the table below (the values disseminated as of 2014-10-20 are highlighted in **green**):

Table 8 InternalDailyClosingPriceType – technical implementation in QuantFEED®

| Component | Value | Description |
|-------------------|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Tag Name | <code>InternalDailyClosingPriceType</code> | 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, as described below. |

Table 8 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). |

2.2.2. MARKET_PINKSHEET_QuoteFlags

The values of the quotation tag **MARKET_PINKSHEET_QuoteFlags** conveyed on the OTC PINKSHEET market data stream are disseminated via QuantFEED® data stream in *Other Values* to indicate the flag(s) associated to a quote:

- 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_PINKSHEET_QuoteFlags** is described in the table below:

Table 9 MARKET_PINKSHEET_QuoteFlags – technical implementation in QuantFEED®

| Component | Value | Description |
|------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Tag Name | MARKET_PINKSHEET_QuoteFlags | QuantFEED® tag name. |
| Numeric ID | 14960 | QuantFEED® unique ID broadcast on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name. |
| Type | UInt16 | Unsigned integer 16-bit data type. |
| Format | <i>[Exchange Specific value]</i> | An exchange specific value , detailing the flag(s) associated to a quote. |
| Possible Values | 1 | Quote Sizes are Provided in Shares, not Lots |
| | 4 | Bid Unsolicited |
| | 8 | Ask Unsolicited |

Quotation Data Sample

Below is an example of the current implementation of the newly added (in green) quotation tags:

```
InstrumentStatusL1
-- 323/36964
  BID: 0.0005      30000
  ASK: 0.0006      1009900
  InternalDailyOpenTimestamp      Timestamp{2014-11-17 10:00:01:684}
  InternalPriceActivityTimestamp  Timestamp{2014-11-17 11:40:48:909}
  TradingStatus                  17=ReadyToTrade
  CurrentBusinessDay             Timestamp{2014-11-17}
  PriceActivityMarketTimestamp    Timestamp{2014-11-17 11:40:48:907}
  InternalDailyClosingPriceType   char{d}
  MARKET_PINKSHEET_QuoteFlags    uint16{1}
```

2.3. Changes to the Quotation Context Data

S&P Capital IQ Real-Time Solutions **introduces** the quotation context tags below to accommodate the information disseminated on the OTC PINKSHEET market data stream:

Table 10 Quotation context tags added on the OTC PINKSHEET market data stream

| Tag Name | Numeric ID | Type |
|---------------------------------|------------|-------|
| MARKET_ULTRAFEED_QuoteCondition | 16410 | UInt8 |

Moreover, S&P Capital IQ Real-Time Solutions **removes** the quotation context tags below:

Table 11 Quotation context tags no longer disseminated on the OTC PINKSHEET market data stream

| Tag Name | Numeric ID | Type |
|----------------------------------------------------------------------------------|------------|------|
| MARKET_PINKSHEET_QuoteCondition (replaced by MARKET_ULTRAFEED_QuoteCondition) | 14961 | Char |

2.3.1. MARKET_ULTRAFEED_QuoteCondition

Each time a trade occurs, the values of the quotation tag **MARKET_ULTRAFEED_QuoteCondition** conveyed on the OTC PINKSHEET market data stream are disseminated via QuantFEED® data stream in *Context* to indicate the condition(s) associated to a quote:

- 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_ULTRAFEED_QuoteCondition` is described in the table below:

Table 12 MARKET_ULTRAFEED_QuoteCondition – technical implementation in QuantFEED®

| Component | Value | Description |
|-----------------|----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Tag Name | MARKET_ULTRAFEED_QuoteCondition | QuantFEED® tag name. |
| Numeric ID | 16410 | QuantFEED® unique ID broadcast on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name. |
| Type | UInt8 | UInt8 data type. |
| Format | <i>[Exchange Specific value]</i> | An exchange specific value , detailing the condition(s) associated to a quote. |
| Possible Values | 0 | None Provided |
| | 1 | Regular |
| | 2 | Slow on Ask |
| | 3 | Slow on Bid |
| | 4 | Closing |
| | 5 | News Dissemination |
| | 6 | Slow on Ask (LRP or Gap Quote) |
| | 7 | Slow on Bid (LRP or Gap Quote) |
| | 8 | Trading Range Indication |
| | 9 | Slow on Bid and Ask |
| | 10 | Order Imbalance |
| | 11 | Due to Related – News Dissemination |
| | 12 | Due to Related – News Pending |
| | 13 | Open |
| | 14 | Closed |
| | 15 | Volatility Trading Pause |
| | 16 | Non-Firm Quote |
| | 17 | Opening |
| | 18 | News Pending |
| | 19 | Due to Related |
| | 20 | Resume |
| | 21 | Slow on Bid and Ask (LRP or Gap Quote) |
| | 22 | In View Of Common |
| | 23 | Slow on Bid and Ask (Set Slow List) |
| | 24 | Equipment Changeover |
| | 25 | Sub-Penny Trading |
| | 26 | No Open / No Resume |
| | 27 | Fast Trading |
| | 28 | Slow on Bid and Ask (Non-Firm) |
| | 29 | One-Sided |
| | 30 | Order Influx |
| | 31 | Special Opening Quote |

Table 12 MARKET_ULTRAFEED_QuoteCondition – technical implementation in QuantFEED® (Continued)

| Component | Value | Description |
|-----------------|-------|-------------------------------------|
| Possible Values | 32 | Halted |
| | 33 | Benchmark |
| | 34 | Implied |
| | 35 | Exchange Best |
| | 36 | Market Wide Circuit Breaker Level 1 |
| | 37 | Market Wide Circuit Breaker Level 2 |
| | 38 | Market Wide Circuit Breaker Level 3 |

Quotation Context Data Sample

Below is an example showing the current implementation of the newly added (in **green**) quotation context tags:

```
"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 12:02:43:096 677391094 * * * * 53.41 100 MARKET_ULTRAFEED_QuoteCondition=uint8{13}
```

3. 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>.