S&P Capital IQ's Real-Time Solutions

# QuantFEED® Feed Description

## NASDAQ TotalView Feed

Reference n°: 20130703

S&P Capital IQ's Real-Time Solutions (QuantHouse®) – QuantFEED®
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**Corporate Headquarters**
S&P Capital IQ's 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

**UK Office**
10 Foster Lane
London EC2V 6HR
United Kingdom
Tel: +44 (0) 203 107 1676

**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

www.quanthouse.com

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# QUANTFEED® NASDAQ TOTALVIEW FEED DESCRIPTION

As part of S&P Capital IQ's Real-Time Solutions's QuantFEED® documentation, this feed description provides you with details about the types of data broadcast on the NASDAQ TotalView market data stream, their possible values and current QuantFEED® technical implementation.

The topics this feed description covers include:

- 1. Referential Data
- 2. Quotation Data
- 3. Official Closing Price
- 4. Finding the Latest Information.

# 1. Referential Data

The following sections describe the characteristics of the referential data on NASDAQ TotalView market data stream, in terms of:

- 1.1. Available Markets and Branches
- 1.2. Types of Instruments.

## 1.1. Available Markets and Branches

This section details the list of markets and branches available on NASDAQ TotalView market data stream:

- 1.1.1. Markets
- 1.1.2. Branches.

### 1.1.1. Markets

The NASDAQ TotalView market data stream broadcasts informations about the following markets:

**Table 1 List of markets available on NASDAQ TotalView market data stream**

| QuantFEED® Market ID | Market |
|---|---|
| XNAS | NASDAQ |

The following example shows the list of markets available on NASDAQ TotalView market data stream and their IDs, returned by the command `dumps`:

```
MARKETS
market # 330    CC=US/UNITED STATES OF AMERICA/NEW YORK,DESCR=NASDAQ,WEB=www.nasdaq.com
    MIC = XNAS
    TimeZone =
    Country =
    NbMaxInstruments = 1000000
```

### 1.1.2. Branches

The example below shows the list of branches available on NASDAQ TotalView market data stream, returned by the command `dumps`. Each branch displays the following details: `FOSMarketID`, `SecurityType`, `CFICode` and `Quantity` (of instruments):

```
BRANCHES
    { XNAS CS   ESNXXX } qty: 6
    { XNAS CS   ESVXXX } qty: 2
    { XNAS CS   ESXXXX } qty: 8319
    { XNAS MF   EUXXXX } qty: 35348
    { XNAS NONE DCXXXX } qty: 5
    { XNAS NONE EUXXXX } qty: 41
    { XNAS NONE EXXXXX } qty: 95
    { XNAS NONE RXXXXX } qty: 25
    { XNAS NONE XXXXXX } qty: 898
    { XNAS PS   EPXXXX } qty: 799
    { XNAS WAR  RWXXXX } qty: 113
```

## 1.2. Types of Instruments

The following sections illustrate the instruments' characteristics on NASDAQ TotalView market data stream, according to their type:

- 1.2.1. Equities
- 1.2.2. Rights
- 1.2.3. Warrants.

### 1.2.1. Equities

The sample below illustrates the details of an equity:

```
instr # 330/2894 = 692063054
    PriceCurrency                string{USD}
    Symbol                       string{MSFT}
    Description                  string{Microsoft Corporation - Common Stock}
    SecurityType                 string{CS}
    FOSMarketId                  XNAS
    CFICode                      string{ESXXXX}
    RoundLot                     float64{100}
    InternalCreationDate         Timestamp{2010-06-17 05:32:09:971}
    InternalModificationDate     Timestamp{2012-11-21 11:10:46:980}
    InternalSourceId             uint16{63}
    InternalAggregationId        uint16{63}
    LocalCodeStr                 string{MSFT}
    PriceIncrement_dynamic_TableId uint32{4128868}
```

### 1.2.2. Rights

The sample below illustrates the details of a right:

```
instr # 330/54066 = 692114226
    PriceCurrency                string{USD}
    Symbol                       string{DNP^}
    Description                  string{Duff & Phelps Utilities Income, Inc. Rights expiring
September 21, 2012}
    SecurityType                 string{NONE}
    FOSMarketId                  XNAS
    CFICode                      string{RXXXXX}
    RoundLot                     float64{100}
    InternalCreationDate         Timestamp{2012-08-27 10:23:15:200}
    InternalModificationDate     Timestamp{2012-09-05 10:14:09:851}
    InternalSourceId             uint16{63}
    LocalCodeStr                 string{DNP^}
    ForeignFOSMarketId           XNYS
    ForeignMarketId              string{XNYS}
    PriceIncrement_dynamic_TableId uint32{4128868}
```

### 1.2.3. Warrants

The sample below illustrates the details of a warrant:

```
instr # 330/30821 = 692090981
    PriceCurrency                string{USD}
    Symbol                       string{VLYWW}
    Description                  string{Valley National Bancorp - Warrants 07/01/2015}
    SecurityType                 string{WAR}
    FOSMarketId                  XNAS
    CFICode                      string{RWXXXX}
    RoundLot                     float64{100}
    InternalCreationDate         Timestamp{2010-06-17 05:32:10:032}
    InternalModificationDate     Timestamp{2012-09-05 10:14:10:188}
    InternalSourceId             uint16{63}
    LocalCodeStr                 string{VLYWW}
    PriceIncrement_dynamic_TableId uint32{4128868}
```

# 2. Quotation Data

The following sections describe the characteristics of the quotation data on NASDAQ TotalView market data stream, in terms of:

- 2.1. Quotation Values
- 2.2. Trading Status
- 2.3. Specific Quotation Tags.

## 2.1. Quotation Values

The examples below shows the possible values of an instrument on NASDAQ TotalView market data stream:

```
InstrumentStatusL1
-- 330/2894
        BID: 26.99      38755   @63
        ASK: 27 39265   @77
        LastPrice                       float64{26.99}
        LastTradeQty                    float64{100}
        DailyTotalVolumeTraded          float64{6974388}
        DailyTotalAssetTraded           float64{187734657.425}
        LastTradePrice                  float64{26.99}
        LastTradeTimestamp              Timestamp{2012-11-21 20:46:55:853}
        InternalDailyOpenTimestamp      Timestamp{2012-11-21 12:00:00:012}
        InternalDailyCloseTimestamp     Timestamp{2012-11-20 21:00:00:735}
        InternalPriceActivityTimestamp  Timestamp{2012-11-21 20:47:16:317}
        TradingStatus                   17=ReadyToTrade
        RegSHOAction                    1=NoPriceTest
        DailyOpeningPrice               float64{26.69}
        PreviousDailyTotalVolumeTraded  float64{10849635}
        PreviousDailyTotalAssetTraded   float64{288757945.035}
        PreviousDailyClosingPrice       float64{26.71}
        PreviousBusinessDay             Timestamp{2012-11-20}
        CurrentBusinessDay              Timestamp{2012-11-21}
        LastAuctionPrice                float64{26.69}
        LastAuctionVolume               float64{421458}
        LastAuctionImbalanceSide        char{N}
        InternalLastAuctionTimestamp    Timestamp{2012-11-21 14:29:55:052}
        MARKET_NASDAQ_FarPrice          float64{26.69}
        MARKET_NASDAQ_NearPrice         float64{26.69}
```

For more details about the fields and tags available in quotation data type, and their possible values, see *FeedOS™ Quotation Tags Guide*.

## 2.2. Trading Status

Each time a modification of the trading status occurs, the values of the quotation tag **Trading Status** conveyed on the NASDAQ TotalView market data stream are disseminated via QuantFEED®'s data stream in *Other Values*:

- 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®'s implementation of the tag `TradingStatus` is described in the following table:

**Table 2 TradingStatus – technical implementation in QuantFEED®**

| Component | Value | Description |
|---|---|---|
| **Tag Name** | `TradingStatus` | QuantFEED® tag name. |
| **Numeric ID** | 9100 | 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** | `Enum` | Enum data type. |
| **Format** | *[Exchange Specific Value]* | An ***exchange specific value***, detailing the characteristics of the trading status. |
| **Possible Values** | 2 | Trading Halt |
| | 5 | Price Indication |
| | 17 | Ready to Trade |
| | 18 | Not Available for Trading |

## 2.3. Specific Quotation Tags

The following sections describe additional, specific quotation tags available on NASDAQ TotalView market data stream:

- 2.3.1. Other Values.

### 2.3.1. Other Values

The following subsections describe the trade conditions on NASDAQ TotalView market data stream:

- 2.3.1.1. Short Sale Price Restriction
- 2.3.1.2. Trading Action Reason
- 2.3.1.3. Far Price
- 2.3.1.4. Near Price.

#### 2.3.1.1. Short Sale Price Restriction

Each time a short sale price restriction occurs, the values of the quotation tag **Short Sale Price Restriction** conveyed on the NASDAQ TotalView market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Other Values*:

- 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 `RegSHOAction` is described in the table below:

**Table 3 RegSHOAction – technical implementation in QuantFEED®**

| Component | Value | Description |
|---|---|---|
| **Tag Name** | `RegSHOAction` | QuantFEED® tag name. |
| **Numeric ID** | `9113` | 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** | `Enum` | Enum data type. |
| **Format** | *[Exchange Specific Value]* | An ***exchange specific value***, detailing the short sale price restriction status. |
| **Possible Values** | `1` | No short sale price restriction. |
| | `2` | Short sale price restriction in progress. |
| | `3` | Short sale price restriction remains in effect for a second business day. |

### 2.3.1.2. Trading Action Reason

Each time a trading action occurs, the values of the quotation tag **Trading Action Reason** conveyed on the NASDAQ TotalView market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Other Values*:

- 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_NASDAQ_TradingActionReason` is described in the table below:

**Table 4 MARKET_NASDAQ_TradingActionReason – technical implementation in QuantFEED®**

| Component | Value | Description |
|---|---|---|
| **Tag Name** | `MARKET_NASDAQ_TradingActionReason` | QuantFEED® tag name. |
| **Numeric ID** | `14770` | 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***, indicating the trading action reason, as described below. |

**Table 4 MARKET_NASDAQ_TradingActionReason – technical implementation in QuantFEED® (Continued)**

| Component | Value | Description |
|---|---|---|
| **Possible Values** | `T1` | Halt News Pending |
| | `T2` | Halt News Disseminated |
| | `T5` | Single Security Trading Pause In Effect |
| | `T6` | Regulatory Halt — Extraordinary Market Activity |
| | `T8` | Halt ET |
| | `T12` | Trading Halted; For Information Requested by Listing Market |
| | `H4` | Halt Non-Compliance |
| | `H9` | Halt Filings Not Current |
| | `H10` | Halt SEC Trading Suspension |
| | `H11` | Halt Regulatory Concern |
| | `O1` | Operations Halt; Contact Market Operations |
| | `IPO1` | IPO Issue Not Yet Trading |
| | `M1` | Corporate Action |
| | `M2` | Quotation Not Available |
| | `Space` | Reason Not Available |
| | `T3` | News and Resumption Times |
| | `T7` | Single Security Trading Pause / Quotation Only Period |
| | `R4` | Qualifications Issues Reviewed / Resolved; Quotations/Trading to Resume |
| | `R9` | Filing Requirements Satisfied / Resolved; Quotations / Trading To Resume |
| | `C3` | Issuer News Not Forthcoming; Quotations/ Trading To Resume |
| | `C4` | Qualifications Halt ended; Maintenance Requirements Met; Resume |
| | `C9` | Qualifications Halt Concluded; Filings Met; Quotes / Trades To Resume |
| | `C11` | Trade Halt Concluded By Other Regulatory Authority; Quotes/Trades Resume |
| | `R1` | New Issue Available |
| | `R2` | Issue Available |
| | `IPOQ` | IPO Security Released for Quotation (NASDAQ Securities Only) |
| | `IPOE` | IPO Security — Positioning Window Extension (NASDAQ Securities Only |

### 2.3.1.3. Far Price

Each time a cross order occurs, the values of the quotation tag **Far Price** conveyed on the NASDAQ TotalView market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Other Values* to indicate the hypothetical auction-clearing 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 `MARKET_NASDAQ_FarPrice` is described in the table below:

**Table 5 MARKET_NASDAQ_FarPrice – technical implementation in QuantFEED®**

| Component | Value | Description |
|---|---|---|
| **Tag Name** | `MARKET_NASDAQ_FarPrice` | QuantFEED® tag name. |
| **Numeric ID** | `14771` | 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** | `Float64` | Float64 data type. |
| **Format / Possible Values** | *`[Exchange Specific Value]`* | An ***exchange specific value***, indicating the hypothetical auction-clearing price for cross orders. |

### 2.3.1.4. Near Price

Each time a cross order or continuous order occurs, the values of the quotation tag **Near Price** conveyed on the NASDAQ TotalView market data stream are disseminated via S&P Capital IQ's Real-Time Solutions's data stream in *Other Values* to indicate the hypothetical auction-clearing 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 `MARKET_NASDAQ_NearPrice` is described in the table below:

**Table 6 MARKET_NASDAQ_NearPrice – technical implementation in QuantFEED®**

| Component | Value | Description |
|---|---|---|
| **Tag Name** | `MARKET_NASDAQ_NearPrice` | QuantFEED® tag name. |
| **Numeric ID** | `14772` | 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** | `Float64` | Float64 data type. |
| **Format / Possible Values** | *`[Exchange Specific Value]`* | An ***exchange specific value***, indicating the hypothetical auction-clearing price for cross orders.and continuous orders. |

# 3. Official Closing Price

On the market NASDAQ, the last auction price provided by the market is the closing price. There is no correction or settlement price.

# 4. Finding the Latest Information

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

- E-mail: support@quanthouse.com
- Web: http://support.quanthouse.com.