



S&P Capital IQ Real-Time Solutions

FeedOS™ Feed Description

SHANGHAI

Reference nº: 20150515 - 17860 - 26633 - 26634

S&P Capital IQ Real-Time Solutions FeedOS[™] Feed Description: SHANGHAI Reference 20150515 – 17860 – 26633 – 26634 July 28, 2015

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FEEDOS™ SHANGHAI FEED DESCRIPTION

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

The topics this feed description covers include:

- 1. Referential Data
- 2. Quotation Data
- 3. Closing Price
- 4. Multi-Session Kinematics
- 5. Finding the Latest Information.

1. Referential Data

The following sections describe the characteristics of the referential data on the SHANGHAI market data stream, in terms of

- 1.1. Available Markets and Branches
- 1.2. Types of Instruments
- 1.3. Specific Referential Tags.

1.1. Available Markets and Branches

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

- 1.1.1. Markets
- 1.1.2. Branches.

1.1.1. Markets

The SHANGHAI market data stream broadcasts informations about the following markets:

Table 1 List of markets available on the SHANGHAI market data stream

FeedOS Market ID	Market
XSHG	Shanghai Stock Exchange

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

1.1.2. Branches

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

1.2. Types of Instruments

The following sections describe the instruments available on the SHANGHAI market data stream, according to their type:

- 1.2.1. Equities
- 1.2.2. Bonds
- 1.2.3. Indices.

1.2.1. Equities

The sample below illustrates the details of an equity:

```
instr # 58/760577 = 122395393
   PriceCurrency
                                string{CNY}
   Symbol
                                string{603718}
   Description
                                string{N 海利}
                                string{CS}
   SecurityType
   FOSMarketId
                                XSHG
   CFICode
                                string{ESXXXX}
   RoundLot
                                float64{100}
   SecuritySubType
                                string{ASH}
                                Timestamp{2015-05-15 00:40:02:937}
   InternalCreationDate
                                Timestamp{2015-05-15 00:55:00:748}
   InternalModificationDate
   InternalSourceId
                                uint16{11}
   InternalAggregationId
                                uint16{11}
   InternalEntitlementId
                                int32{1082}
   LocalCodeStr
                                string{603718}
   PriceIncrement_static
                                float64{0.01}
   OperatingMIC
                                string{XSHG}
```

1.2.2. Bonds

The sample below illustrates the details of a bond:

```
instr # 58/760558 = 122395374
   PriceCurrency
                                string{CNY}
   Symbol 3
                                string{122369}
                                string{13 包钢 04}
   Description
   SecurityType
                                string{CORP}
   FOSMarketId
                                XSHG
   CouponRate
                                float64{4.75}
   IssueDate
                                Timestamp{2015-04-21}
   CFICode
                                string{DBXGXR}
   RoundLot
                                float64{1}
   SecuritySubType
                                string{CPF}
   DatedDate
                                Timestamp{2015-05-11}
   InternalCreationDate
                                Timestamp{2015-05-11 00:40:02:894}
   InternalModificationDate
                                Timestamp{2015-05-12 00:55:00:374}
   InternalSourceId
                                uint16{11}
   InternalAggregationId
                                uint16{11}
   InternalEntitlementId
                                int32{1082}
   LocalCodeStr
                                string{122369}
   PriceIncrement_static
                                float64{0.01}
                                uint16{2018}
   MaturityYear
   MaturityMonth
                                uint8{4}
   MaturityDay
                                uint8{21}
   OperatingMIC
                                string{XSHG}
                                float64{100}
   FaceValue
   RateType
                                char{X}
   PaymentPeriod
                                uint16{360}
```

1.2.3. Indices

The sample below illustrates the details of an index:

```
instr # 58/750284 = 122385100
   Symbol
                                string{000997}
   Description
                                string{ 大消费 }
                                string{INDEX}
   SecurityType
   FOSMarketId
                                XSHG
   CFICode
                                string{TIXXXX}
   InternalCreationDate
                                Timestamp{2015-02-26 03:14:14:316}
   InternalModificationDate
                                Timestamp{2015-02-26 06:08:48:898}
   InternalSourceId
                                uint16{11}
   InternalAggregationId
                                uint16{11}
   InternalEntitlementId
                                int32{1083}
   LocalCodeStr
                                string{000997}
   OperatingMIC
                                string{XSHG}
```

1.3. Specific Referential Tags

The following sections describe additional, specific referential tags available on the SHANGHAI market data stream:

• 1.3.1. OperatingMIC.

1.3.1. OperatingMIC

The values of the referential tag **OperatingMIC** conveyed on the SHANGHAI market data stream are disseminated via FeedOS data stream in *Referential* to specify the parent MIC.

FeedOS implementation of the tag OperatingMIC is described in the table below:

Table 2 OperatingMIC – technical implementation in FeedOS

Component	Value	Description
Tag Name	OperatingMIC	FeedOS tag name.
Numeric ID	9533	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	String	String data type.
Format	[Exchange Specific Value]	An exchange specific value, specifying the parent MIC.
Possible Values	XSHG	Shanghai Stock Exchange

2. Quotation Data

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

- 2.1. Quotation Values
- 2.2. TradingStatus

- 2.3. Specific Quotation Tags
- 2.4. MBL and MBO Data.

2.1. Quotation Values

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

```
InstrumentStatusL1
-- 58/760558
                        200
       BID: 100
       ASK: 100.1
                                @1
       LastPrice
                                        float64{100.05}
                                        float64{200}
       LastTradeQty
       DailyHighPrice
                                        float64{100.1}
       DailyLowPrice
                                        float64{99.8}
       DailyTotalVolumeTraded
                                        float64{1348}
       DailyTotalAssetTraded
                                        float64{134785.4}
       LastTradePrice
                                        float64{100.05}
       LastTradeTimestamp
                                        Timestamp{2015-05-15 06:13:23:068}
       InternalDailyOpenTimestamp
                                        Timestamp{2015-05-15 01:25:08:506}
       InternalDailyCloseTimestamp
                                        Timestamp{2015-05-15 07:00:04:675}
       InternalPriceActivityTimestamp
                                        Timestamp{2015-05-15 07:00:04:675}
       TradingStatus
                                        18=NotAvailableForTrading
       TradingSessionId
                                        int8{2}
       SessionTotalOffBookAssetTraded float64{0}
        SessionTotalOffBookVolumeTraded float64{0}
        PriorSessionsTotalAssetTraded
                                        float64{20559.66}
        PriorSessionsTotalVolumeTraded float64{206}
        PriorSessionsTotalOffBookAssetTraded
                                                float64{0}
        PriorSessionsTotalOffBookVolumeTraded
                                                float64{0}
       SessionTotalVolumeTraded
                                        float64{1142}
        SessionOpeningPrice
                                        float64{99.81}
       PreviousSessionClosingPrice
                                        float64{99.81}
       SessionTotalAssetTraded
                                        float64{114225.74}
       SessionClosingPrice
                                        float64{100.05}
       DailyOpeningPrice
                                        float64{99.8}
                                        float64{100.05}
       DailyClosingPrice
       PreviousDailyTotalVolumeTraded float64{1095}
        PreviousDailyTotalAssetTraded
                                        float64{109491.68}
       PreviousDailyClosingPrice
                                        float64{100.1}
       PreviousBusinessDay
                                        Timestamp{2015-05-14}
                                        Timestamp{2015-05-15}
       CurrentBusinessDay
       LastAuctionImbalanceSide
                                        char{N}
       InternalDailyClosingPriceType
                                        char{a}
       PreviousInternalDailyClosingPriceType
                                                char{a}
                                        Timestamp{2015-05-11 01:25:04:843}
       InternalLastAuctionTimestamp
        PriceActivityMarketTimestamp
                                        Timestamp{2015-05-15 07:00:00}
```

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

2.2. TradingStatus

Each time a modification of the trading status occurs, the values of the quotation tag **TradingStatus** conveyed on the SHANGHAI market data stream are disseminated via FeedOS 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 Levell event quotNotifTradeEventExt, for Java.

FeedOS implementation of the tag TradingStatus is described in the following table:

Table 3 TradingStatus – technical implementation in FeedOS

Component	Value	Description
Tag Name	TradingStatus	FeedOS tag name.
Numeric ID	9100	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Туре	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
	21	Pre-Open

2.3. Specific Quotation Tags

The following sections describe additional, specific quotation tags available on the SHANGHAI market data stream:

• 2.3.1. Other Values.

2.3.1. Other Values

The following subsections describe the other values available on the SHANGHAI market data stream:

- 2.3.1.1. LastAuctionImbalanceSide
- 2.3.1.2. InternalDailyClosingPriceType.

2.3.1.1. LastAuctionImbalanceSide

The values of the quotation tag **LastAuctionImbalanceSide** conveyed on the SHANGHAI market data stream are disseminated via FeedOS data stream in *Other Values* to indicate the imbalance side of a closing auction:

- 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.

FeedOS implementation of the tag LastAuctionImbalanceSide is described below:

Table 4 LastAuctionImbalanceSide – technical implementation in FeedOS

Component	Value	Description
Tag Name	LastAuctionImbalanceSide	FeedOS tag name.
Numeric ID	9151	FeedOS 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	[Exchange Specific Value]	An exchange specific value, detailing the imbalance side of a closing auction.
	В	Buy
Possible Values	N	No Imbalance
	S	Sell

2.3.1.2. Internal Daily Closing Price Type

The values of the quotation tag **InternalDailyClosingPriceType** conveyed on the SHANGHAI market data stream are disseminated via FeedOS 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.

FeedOS implementation of the tag InternalDailyClosingPriceType is described in the table below (the values currently disseminated are highlighted in green):

Table 5 Internal Daily Closing Price Type – technical implementation in FeedOS

Component	Value	Description
Tag Name	InternalDailyClosingPriceType	FeedOS tag name.
Numeric ID	9155	FeedOS 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, as described below.

Table 5 Internal Daily Closing Price Type – technical implementation in FeedOS (Continued)

Component	Value	Description
Possible Values C d e	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.
	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).

2.4. MBL and MBO Data*

The MBL book has a 10-level depth. The MBO book is full depth.

3. Closing Price

The closing price is provided by the market. If the closing price is not sent by the market, the last trade is used instead. When a stock splits, the closing price is adjusted after the closing. There is no settlement price.

4. Multi-Session Kinematics

The following diagram describes the main trading phases and the update mechanism of the tags on the SHANGHAI market data stream:

^{*} The MBL and MBO and BBO data may not be included by default in your Level1 data subscription, but sold separately. Depending on your contract, additional terms, conditions and fees may apply. For more details about the subscription options, please contact S&P Capital IQ Real-Time Solutions.

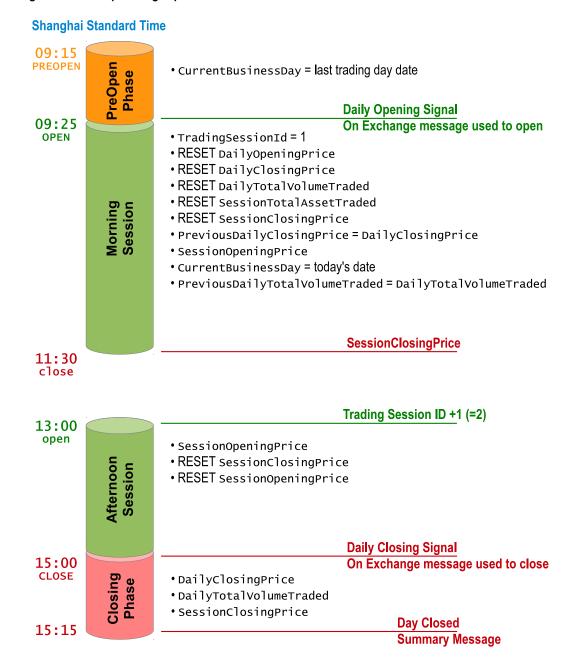


Figure 1 Example of tags update mechanism on the SHANGHAI market data stream

5. 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: rts-support@spcapitaliq.com
- Web: https://support.quanthouse.com.