S&P CAPITAL IQ
McGRAW HILL FINANCIAL

S&P Capital IQ Real-Time Solutions

FeedOS™ Feed Description

BURSA MALAYSIA EQUITIES

Reference n°: 20150803 – 22860 – 28152 – 28153

S&P Capital IQ Real-Time Solutions
FeedOS™ Feed Description: BURSA MALAYSIA EQUITIES
Reference 20150803 – 22860 – 28152 – 28153
August 06, 2015

France
52 Rue de la Victoire
75009 Paris
France
Tel: +33 (0) 1 73 02 32 11

United States
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

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

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

www.spcapitaliq.com

TABLE OF CONTENTS

FEEDOS™ BURSA MALAYSIA EQUITIES 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 disseminated on the BURSA MALAYSIA EQUITIES market data stream, their possible values and current FeedOS technical implementation.

The topics this feed description covers include:

1. Referential Data

The following sections describe the characteristics of the referential data on the BURSA MALAYSIA EQUITIES market data stream, in terms of:

1.1. Available Markets and Branches

This section details the list of Markets and Branches available on the BURSA MALAYSIA EQUITIES market data stream.

1.1.1. Markets

The BURSA MALAYSIA EQUITIES market data stream disseminates informations about the following markets:

Table 1 List of markets available on the BURSA MALAYSIA EQUITIES market data stream

FeedOS Market ID	Market
XKLS	Bursa Malaysia

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

```
MARKETS
market # 168    CC=MY/MALAYSIA/KUALA LUMPUR,DESCR=BURSA MALAYSIA,WEB=www.klse.com.my
    MIC = XKLS
    TimeZone = Asia/Kuala_Lumpur
    Country = MY
    NbMaxInstruments = 2000000
```

1.1.2. Branches

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

```
BRANCHES
    { XKLS CS   DBXXXX } qty: 108
    { XKLS CS   ESXXXX } qty: 3844
    { XKLS ETF  EUXXXE } qty: 28
    { XKLS GO   DBXXXX } qty: 12
    { XKLS INDEX TIXXXX } qty: 24
    { XKLS MF   EUCXXX } qty: 4
    { XKLS MF   EUXXXX } qty: 64
    { XKLS PS   EPXXXX } qty: 44
    { XKLS WAR  RWBCXX } qty: 4
    { XKLS WAR  RWXXCX } qty: 3836
    { XKLS WAR  RWXXPX } qty: 272
    { XKLS WAR  RWXXXX } qty: 1140
```

1.2. Types of Instruments

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

- 1.2.1. Bonds
- 1.2.2. Equities
- 1.2.3. Index
- 1.2.4. Warrant.

1.2.1. Bonds

The sample below illustrates the details of a bond:

```
instr # 168/1005915 = 353327451
    PriceCurrency               string{MYR}
    Symbol                      string{DIN040000223}
    Issuer                      string{0400}
    Description                 string{DANAINFRA NASIONAL-ETBS 4%0223}
    SecurityType                string{GO}
    FOSMarketId                 XKLS
    CouponRate                  float64{4}
    IssueDate                   Timestamp{2013-02-08}
    CFICode                     string{DBXXXX}
    RoundLot                    float64{1}
    MinTradeVol                 float64{10}
    SecuritySubType             string{NM}
    MaxTradeVol                 float64{50000}
    SecurityGroup               string{BOND}
    ProductComplex              string{0060}
    MarketSegmentID             string{NM}
    InternalCreationDate        Timestamp{2014-09-16 23:00:06:144}
    InternalModificationDate    Timestamp{2015-01-08 09:16:58:037}
    InternalSourceId            uint16{251}
    InternalAggregationId       uint16{251}
    InternalEntitlementId       int32{1161}
    DelayedFeedMin              uint16{15}
    LocalCodeStr                string{0400GA_NM}
    ISIN                        string{MYBVN1300711}
    MaturityYear                uint16{2023}
    MaturityMonth               uint8{2}
    MaturityDay                 uint8{8}
    PriceIncrement_dynamic_TableId  uint32{16449638}
    OperatingMIC                string{XKLS}
```

1.2.2. Equities

The sample below illustrates the details of an equity:

```
instr # 168/1006416 = 353327952
    PriceCurrency               string{MYR}
    Symbol                      string{PBBANK}
    Issuer                      string{1295}
    Description                 string{PUBLIC BANK BHD}
    SecurityType                string{CS}
    FOSMarketId                 XKLS
    CFICode                     string{ESXXXX}
    RoundLot                    float64{1}
    MinTradeVol                 float64{100}
    SecuritySubType             string{NM}
    MaxTradeVol                 float64{500000}
    SecurityGroup               string{MAIN}
    ProductComplex              string{0010}
    MarketSegmentID             string{NM}
    InternalCreationDate        Timestamp{2014-09-16 23:00:06:550}
    InternalModificationDate    Timestamp{2015-08-02 23:00:04:154}
    InternalSourceId            uint16{251}
    InternalEntitlementId       int32{1161}
    LocalCodeStr                string{1295_NM}
    ISIN                        string{MYL1295OO004}
    PriceIncrement_dynamic_TableId  uint32{16449654}
    OperatingMIC                string{XKLS}
```

1.2.3. Index

The sample below illustrates the details of an index:

```
instr # 168/1004264 = 353325800
    PriceCurrency               string{MYR}
    Symbol                      string{FBMACE}
    Issuer                      string{BMB}
    Description                 string{FBM ACE}
    SecurityType                string{INDEX}
    FOSMarketId                 XKLS
    CFICode                     string{TIXXXX}
    RoundLot                    float64{1}
    MinTradeVol                 float64{100}
    SecuritySubType             string{IN}
    MarketSegmentID             string{IN}
    InternalCreationDate        Timestamp{2014-09-16 23:00:04:239}
    InternalModificationDate    Timestamp{2015-01-08 09:16:58:261}
    InternalSourceId            uint16{251}
    InternalAggregationId       uint16{251}
    InternalEntitlementId       int32{1162}
    DelayedFeedMin              uint16{15}
    LocalCodeStr                string{0871I_IN}
    ISIN                        string{MYX0871OO008}
    PriceIncrement_dynamic_TableId  uint32{16449638}
    OperatingMIC                string{XKLS}
```

1.2.4. Warrant

The sample below illustrates the details of a warrant:

```
instr # 168/1010336 = 353331872
    PriceCurrency               string{MYR}
    Symbol                      string{CHINA50-H8}
    Issuer                      string{MACQ}
    Description                 string{CHINA50-H8: PW FTSE CHINA A50 INDEX (MACQ)}
    SecurityType                string{WAR}
    StrikePrice                 float64{10000}
    FOSMarketId                 XKLS
    CFICode                     string{RWXXPX}
    RoundLot                    float64{1}
    MinTradeVol                 float64{100}
    SecuritySubType             string{NM}
    MaxTradeVol                 float64{500000}
    SecurityGroup               string{STRW}
    ProductComplex              string{0058}
    MarketSegmentID             string{NM}
    InternalCreationDate        Timestamp{2015-07-26 23:00:04:302}
    InternalModificationDate    Timestamp{2015-08-02 23:10:01:404}
    InternalSourceId            uint16{251}
    InternalAggregationId       uint16{251}
    InternalEntitlementId       int32{1161}
    DelayedFeedMin              uint16{15}
    LocalCodeStr                string{0655H8_NM}
    ISIN                        string{MYJ0655H8Q18}
    UnderlyingLocalCodeStr      string{0000FR_NM}
    MaturityYear                uint16{2016}
    MaturityMonth               uint8{1}
    MaturityDay                 uint8{28}
    PriceIncrement_dynamic_TableId  uint32{16449654}
    OperatingMIC                string{XKLS}
```

1.3. Specific Referential Tags

The following sections describe the specific referential tags available on the BURSA MALAYSIA EQUITIES market data stream:

1.3.1. OperatingMIC

The values of the referential tag **OperatingMIC** conveyed on the BURSA MALAYSIA EQUITIES 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.
Type	`String`	String data type.
Format	*`[Exchange Specific Value]`*	An ***exchange specific value***, specifying the parent MIC.
Possible Values	`XKLS`	Parent MIC for all branches of the BURSA MALAYSIA.

2. Quotation Data

The sections below describe the characteristics of the quotation data on the BURSA MALAYSIA EQUITIES market data stream, in terms of:

2.1. Quotation Values

The example below shows the possible values of an instrument on the BURSA MALAYSIA EQUITIES market data stream:

```
InstrumentStatusL1
-- 168/1006416
        BID: 19.04      797000  @4
        ASK: 19.06      623800  @4
        LastPrice                       float64{19.06}
        LastTradeQty                    float64{3600}
        DailyHighPrice                  float64{19.18}
        DailyLowPrice                   float64{19}
        DailyTotalVolumeTraded          float64{2310900}
        DailyTotalAssetTraded           float64{44014902}
        LastTradePrice                  float64{19.06}
        LastTradeTimestamp              Timestamp{2015-08-03 08:51:20:151}
        InternalDailyOpenTimestamp      Timestamp{2015-08-03 01:00:00:186}
        InternalDailyCloseTimestamp     Timestamp{2015-08-03 09:00:00:149}
        InternalDailyHighTimestamp      Timestamp{2015-08-03 01:08:12:121}
        InternalDailyLowTimestamp       Timestamp{2015-08-03 01:00:00:223}
        InternalPriceActivityTimestamp  Timestamp{2015-08-03 08:51:20:159}
        LowLimitPrice                   float64{13.3}
        HighLimitPrice                  float64{24.7}
        TradingStatus                   18=NotAvailableForTrading
        TradingSessionId                int8{2}
        PriorSessionsTotalAssetTraded   float64{11077236}
        PriorSessionsTotalVolumeTraded  float64{582000}
        SessionTotalVolumeTraded        float64{2310900}
        SessionVWAPPrice                float64{19.047}
        SessionTotalAssetTraded         float64{44014902}
        DailyOpeningPrice               float64{19}
        DailyClosingPrice               float64{19.06}
        PreviousDailyTotalVolumeTraded  float64{8628800}
        PreviousDailyTotalAssetTraded   float64{163928552}
        PreviousDailyClosingPrice       float64{19}
        PreviousBusinessDay             Timestamp{2015-07-31}
        CurrentBusinessDay              Timestamp{2015-08-03}
        InternalDailyClosingPriceType   char{a}
        PreviousInternalDailyClosingPriceType  char{a}
        InternalLastAuctionTimestamp    Timestamp{2015-08-03 08:49:50:217}
        InternalCrossIndicator          bool{False}
        PriceActivityMarketTimestamp    Timestamp{2015-08-03 08:51:20:151}
        InternalDailyBusinessDayTimestamp     Timestamp{2015-08-03 01:00:00:186}
        TradingReferencePrice           float64{19}
```

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 BURSA MALAYSIA EQUITIES 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 Level1 event `quotNotifTradeEventExt`, for Java.

FeedOS implementation of the tag **Trading Status** is described in the table below:

Table 3 TradingStatus – technical implementation in FeedOS

Component	Value	Description
Tag Name	`TradingStatus`	FeedOS tag name.
Numeric ID	`9100`	FeedOS unique ID broadcast on S&P Capital IQ Real-Time Solutions data stream. It is the numeric equivalent of the tag name.
Type	`Enum`	Enumeration data type.
Format	*`[Exchange Specific Value]`*	An ***exchange specific value***, as described below, concerning the characteristics of the trading status.
Possible Values	`2`	Trading Halt
	`5`	Price Indication
	`17`	Ready to Trade
	`18`	Not Available for Trading
	`20`	Unknown or Invalid
	`21`	Pre-Open

2.3. Specific Quotation Tags

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

- 2.3.1. Other Values.

2.3.1. Other Values

The following subsections describe the other values available on the BURSA MALAYSIA EQUITIES market data stream:

- 2.3.1.1. InternalDailyClosingPriceType

2.3.1.1. InternalDailyClosingPriceType

The values of the quotation tag **InternalDailyClosingPriceType** conveyed on the BURSA MALAYSIA EQUITIES 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 Level1 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 4 InternalDailyClosingPriceType – technical implementation in FeedOS

Component	Value	Description
Tag Name	`InternalDailyClosingPriceType`	FeedOS tag name.
Numeric ID	`9155`	FeedOS unique ID disseminated on the S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	`Char`	Char data type.
Format	*`[Internal Specific Value]`*	An ***internal specific value***, detailing the type of daily closing price, as described below.
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).

2.4. MBL and MBO Data*

The MBL book has a 5-level depth. There is no MBO.

3. Closing Price

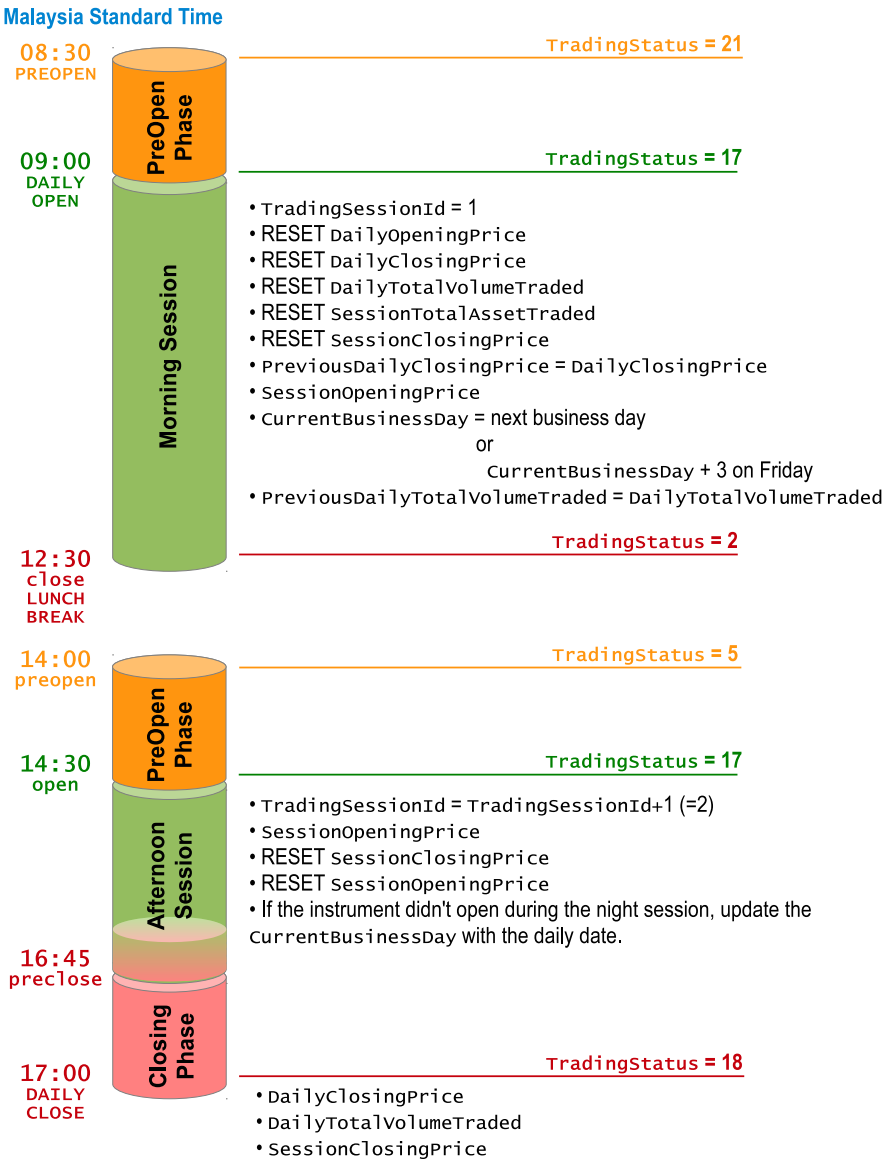
The closing price is the last trade price upon close, as provided by the exchange. The settlement price is handled when provided by the market.

* The MBL and MBO 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.

4. Multi-Session Kinematics

The following diagram describes the main trading phases on the BURSA MALAYSIA EQUITIES market data stream:

Figure 1 Example of tags update mechanism on the BURSA MALAYSIA EQUITIES 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.