S&P Capital IQ Real-Time Solutions

QuantFEED® Feed Description

BURSA MALAYSIA DERIVATIVES Feed

Reference n°: 20140303 - 18822 - 19444



S&P Capital IQ Real-Time Solutions (QuantHouse*) – QuantFEED* QuantFEED* Feed Description Reference 20140303 – 18822 – 19444 July 02, 2014

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

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

UK Office

20 Canada Square Canary Wharf London E14 5LH United Kingdom

Tel: +44 (0) 203 107 1676

www.quanthouse.com

130 East Randolph One Prudential Plaza, Suite 2900 Chicago, IL 60601 United States of America Tel: +1-(312)-233-7129

Singapore Office

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

Disclaimer for Technical Documents

QuantHouse* S.A.S. endeavors to include accurate and current information in its materials. However, QuantHouse* does not warrant the accuracy or completeness of the information contained herein. QuantHouse* may change such information at any time, but makes no commitment to update it.

References by QuantHouse* to products offered by third-parties do not constitute an endorsement by QuantHouse* of such products and should not be construed as an association with their owners.

YOUR USE OF THE INFORMATION HEREIN IS AT YOUR OWN RISK. SUCH INFORMATION IS PROVIDED ON AN "AS IS" BASIS. QUANTHOUSE" S.A.S. MAKES NO REPRESENTATION, UNDERTAKES NO OBLIGATION, AND PROVIDES NO WARRANTY OF ANY KIND WITH RESPECT TO THE INFORMATION CONTAINED HEREIN, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT. IF YOU CHOOSE TO USE SUCH INFORMATION, YOU ARE ACKNOWLEDGING THAT YOU HAVE READ THIS DISCLAIMER, UNDERSTAND IT, AGREE TO ABIDE BY, AND BE BOUND BY, ITS PROVISIONS.

Use of the Information

The information constitutes proprietary material and is either owned by or licensed to QuantHouse*. Further, it is protected by intellectual property rights. No information may be used, reproduced, stored in or introduced into a retrieval system, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise) or for any purpose, except as licensed expressly by QuantHouse* S.A.S.

Trademarks

QUANTHOUSE*, the QuantHouse* logo and product names are trademarks of QuantHouse* S.A.S. and QuantHouse* S.A.S. reserves all intellectual property rights with respect to the trademarks. All other trademarks are the trademarks of their respective owners.

Copyright

© Copyright 2004-2014 QuantHouse* S.A.S. All rights reserved.

TABLE OF CONTENTS

QuantFEED® BURSA MALAYSIA DERIVATIVES Feed Description:

1. Referential Data]
1.1. Available Markets and Branches	
1.1.1. Markets]
1.1.2. Branches	
1.2. Types of Instruments	
1.2.1. Futures	
1.2.2. Options	
1.2.3. Multilegs	
1.3. Referential Tags	
1.3.1. Operating MIC	
2. Quotation Data	6
2.1. Quotation Values	
2.2. Trading Status	7
3. Official Closing Price	8
4. Session Kinematics	8
5. Finding the Latest Information	(



QUANTFEED® BURSA MALAYSIA DERIVATIVES FEED DESCRIPTION

As part of S&P Capital IQ Real-Time Solutions QuantFEED* documentation, this feed description provides you with details about the types of data broadcast on the BURSA MALAYSIA DERIVATIVES 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. Session Kinematics
- 5. Finding the Latest Information.

1. Referential Data

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

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

1.1. Available Markets and Branches

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

1.1.1. Markets

The BURSA MALAYSIA DERIVATIVES market data stream broadcasts informations about the following markets:

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

QuantFEED® Market ID	Market	
XKLS	Bursa Malaysia	

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

1.1.2. Branches

The example below shows the complete list of branches available on the BURSA MALAYSIA DERIVATIVES 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 FUT FCAXSX } qty: 60

{ XKLS FUT FFDXSX } qty: 34

{ XKLS FUT FFIXSX } qty: 63

{ XKLS FUT FXXXSX } qty: 11

{ XKLS MLEG FMAXSX } qty: 275

{ XKLS MLEG FMDXSX } qty: 48

{ XKLS MLEG FMIXSX } qty: 135

{ XKLS MLEG FMXSX } qty: 49

{ XKLS OPT OCEFPS } qty: 401

{ XKLS OPT OPEFPS } qty: 401
```

1.2. Types of Instruments

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

- 1.2.1. Futures
- 1.2.2. Options
- 1.2.3. Multilegs.

1.2.1. Futures

The sample below illustrates the details of a future:

```
instr # 168/1010 = 352322546
   PriceCurrency
                                string{MYR}
   Symbol
                                string{OKLI}
   SecurityType
                                string{OPT}
   StrikePrice
                                float64{1810}
   FOSMarketId
                                XKLS
   CFICode
                                string{OCEFPS}
   MinTradeVol
                                float64{1}
   StrikeCurrency
                                string{MYR}
   MatchAlgorithm
                                string{F}
   MarketSegmentID
                                string{5}
   MarketSegmentDesc
                                string{Equity}
   InternalCreationDate
                                Timestamp{2014-04-18 16:44:21:657}
   InternalModificationDate
                                Timestamp{2014-05-02 21:31:01:152}
   InternalHideFromLookup
                                bool{True}
   InternalSourceId
                                uint16{35}
   LocalCodeStr
                                string{OKLIJ4_C1810}
                                float64{0.1}
   PriceIncrement_static
   PriceDisplayPrecision
                                int16{0}
   UnderlyingFOSMarketId
                                XKLS
   UnderlyingLocalCodeStr
                                string{FKLIJ4}
   UnderlyingFOSInstrumentCode uint32{352322849}
   MaturityYear
                                uint16{2014}
   MaturityMonth
                                uint8{4}
   MaturityDay
                                uint8{30}
   OperatingMIC
                                string{XKLS}
```

1.2.2. Options

The sample below illustrates the details of an option:

```
instr # 168/2109 = 352323645
   PriceCurrency
                                string{MYR}
   Symbol
                                string{OKLI}
   SecurityType
                                string{OPT}
   StrikePrice
                                float64{1940}
   FOSMarketId
                                XKLS
   CFICode
                                string{OPEFPS}
   MinTradeVol
                                float64{1}
                                string{MYR}
   StrikeCurrency
   MatchAlgorithm
                                string{F}
   MarketSegmentID
                                string{5}
   MarketSegmentDesc
                                string{Equity}
   InternalCreationDate
                                Timestamp{2014-05-14 17:00:07:617}
   InternalModificationDate
                                Timestamp{2014-05-31 21:31:01:653}
   InternalHideFromLookup
                                bool{True}
   InternalSourceId
                                uint16{35}
   LocalCodeStr
                                string{OKLIK4_P1940}
   PriceIncrement_static
                                float64{0.1}
   PriceDisplayPrecision
                                int16{0}
   UnderlyingFOSMarketId
                                XKLS
   UnderlyingLocalCodeStr
                                string{FKLIK4}
   UnderlyingFOSInstrumentCode uint32{352322699}
   MaturityYear
                                uint16{2014}
   MaturityMonth
                                uint8{5}
   MaturityDay
                                uint8{30}
   OperatingMIC
                                string{XKLS}
```

1.2.3. Multilegs

The sample below illustrates the details of a multileg:

```
instr # 168/2462 = 352323998
   PriceCurrency
                               string{MYR}
   Symbol
                               string{FAIR}
   Description
                               string{FAIR CALENDAR}
   SecurityType
                               string{MLEG}
   StdMaturity
                               string{201408}
   FOSMarketId
                               XKLS
   CFTCode
                               string{FMIXSX}
   NbLegs
                               uint8{2}
   MinTradeVol
                               float64{1}
   SecuritySubType
                             string{SP}
   MatchAlgorithm
                             string{F}
   MarketSegmentID
                             string{5}
   MarketSegmentDesc
                               string{Equity}
                               Timestamp{2014-06-17 17:00:08:013}
   InternalCreationDate
   InternalModificationDate
                               Timestamp{2014-07-01 21:31:07:870}
   InternalSourceId
                               uint16{35}
   InternalEntitlementId
                               int32{1164}
                               string{FAIRQ4-FAIRU4}
   LocalCodeStr
   PriceIncrement_static
                               float64{0.02}
   PriceDisplayPrecision
                               int16{0}
   MaturityYear
                               uint16{2014}
   MaturityMonth
                               uint8{8}
   MaturityDay
                               uint8{29}
   OperatingMIC
                               string{XKLS}
   LegFOSInstrumentCode
                               uint32{352323993}
   LegFOSInstrumentCode_1
                               uint32{352322842}
   LegRatioQty
                               float64{1}
                               float64{1}
   LegRatioQty_1
   LegFIXSide
                                '1'=Buy
   LegFIXSide_1
                                '2'=Sell
```

1.3. Referential Tags

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

• 1.3.1. Operating MIC

1.3.1. Operating MIC

The values of the referential tag **Operating MIC** conveyed on the BURSA MALAYSIA DERIVATIVES market data stream are disseminated via QuantFEED* data stream in *Referential* to specify the parent MIC.

QuantFEED* implementation of the values currently available for the tag OperatingMIC is described in the table below:

Table 2 OperatingMIC – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	OperatingMIC	QuantFEED® tag name.
Numeric ID	9533	QuantFEED® unique ID disseminated on 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	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 DERIVATIVES market data stream, in terms of:

- 2.1. Quotation Values
- 2.2. Trading Status.

2.1. Quotation Values

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

```
InstrumentStatusL1
-- 168/1010
        BID: 1800
                                @2
        ASK: 1822
                                @1
        LastPrice
                                        float64{1819.5}
        LastTradeQty
                                        float64{1}
        DailyHighPrice
                                        float64{1822}
        DailvLowPrice
                                        float64{1815.5}
        DailyTotalVolumeTraded
                                        float64{258}
        DailyTotalAssetTraded
                                        float64{469418}
                                        float64{1819.5}
        LastTradePrice
        LastTradeTimestamp
                                        Timestamp{2014-05-02 09:14:45:066}
        InternalDailyOpenTimestamp
                                        Timestamp{2014-05-02 00:45:00:013}
        InternalDailyCloseTimestamp
                                        Timestamp{2014-05-02 09:30:00:004}
        InternalDailyHighTimestamp
                                        Timestamp{2014-05-02 08:10:39:062}
        InternalDailyLowTimestamp
                                        Timestamp{2014-05-02 01:07:49:709}
        InternalPriceActivityTimestamp
                                        Timestamp{2014-05-02 09:30:00:014}
        SettlPriceType
                                        uint8{100}
        LowLimitPrice
                                        float64{1455.5}
        HighLimitPrice
                                        float64{2182.5}
                                        18=NotAvailableForTrading
        TradingStatus
        DailyOpeningPrice
                                        float64{1816.5}
        DailyClosingPrice
                                        float64{1819.5}
        DailySettlementPrice
                                        float64{1819.5}
        CurrentBusinessDay
                                        Timestamp{2014-05-02}
        PreviousDailySettlementPrice
                                        float64{1815.5}
        PriceActivityMarketTimestamp
                                        Timestamp{2014-05-02 09:30:00:013}
```

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

2.2. Trading Status

Each time a modification of the trading status occurs, the values of the quotation tag **Trading Status** in the BURSA MALAYSIA DERIVATIVES market data stream are disseminated via QuantFEED* 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 **Trading Status** is described in the table below:

Table 3 Trading Status of the BURSA MALAYSIA DERIVATIVES market data stream – technical implementation in QuantFEED®

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

3. Official 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.

4. Session Kinematics

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

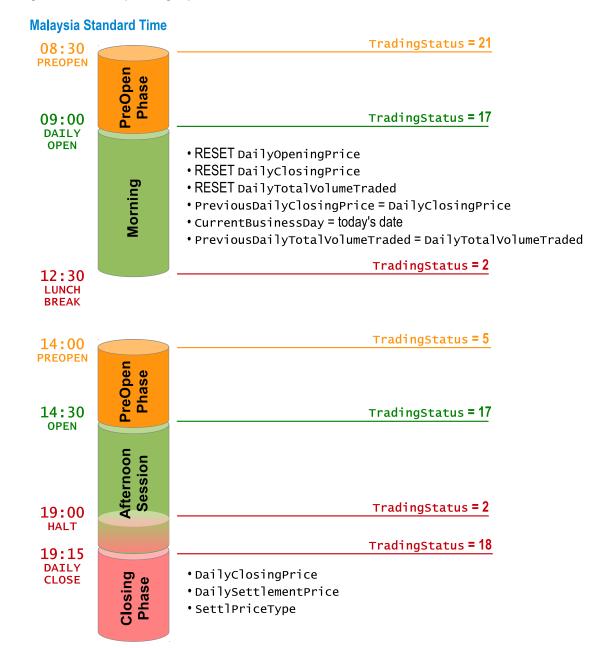


Figure 3-1 Example of tags update mechanism on the BURSA MALAYSIA DERIVATIVES market data stream

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: http://support.quanthouse.com.