



S&P Capital IQ Real-Time Solutions

FeedOS™ Feed Description

KOREAN EQUITIES

Reference n°: 20150729 – 22904 – 21954

S&P Capital IQ Real-Time Solutions
FeedOS™ Feed Description: KOREAN EQUITIES
Reference 20150729 – 22904 – 21954
July 29, 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

Copyright © 2015 by Standard & Poor's Financial Services LLC, a part of McGraw Hill Financial.

All rights reserved. S&P CAPITAL IQ is a trademark of Standard & Poor's Financial Services LLC. STANDARD & POOR'S, S&P, GLOBAL CREDIT PORTAL and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

TABLE OF CONTENTS

| | |
|---|----|
| FeedOS™ KOREAN EQUITIES Feed Description | 1 |
| 1. Referential Data | 1 |
| 1.1. Available Markets and Branches | 1 |
| 1.1.1. Markets | 1 |
| 1.1.2. Branches | 2 |
| 1.2. Types of Instruments | 3 |
| 1.2.1. Equities | 3 |
| 1.2.2. Bonds | 4 |
| 1.2.3. Indices | 4 |
| 1.2.4. Warrant | 5 |
| 1.3. Specific Referential Tags | 6 |
| 1.3.1. PriceCurrency | 6 |
| 2. Quotation Data | 6 |
| 2.1. Quotation Values | 7 |
| 2.2. Trading Status | 7 |
| 2.3. MBL and MBO Data | 8 |
| 3. Closing Price | 8 |
| 4. Extended-Session Kinematics | 8 |
| 5. Special Behavior | 9 |
| 5.1. Level1 Market Data Kinematics – TradingStatus at the Beginning of the G3 Board | 10 |
| 6. Finding the Latest Information | 11 |



FEEDOS™ KOREAN 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 broadcast on the KOREAN EQUITIES 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. Extended-Session Kinematics](#)
- [5. Special Behavior](#)
- [6. Finding the Latest Information.](#)

1. Referential Data

The following sections describe the characteristics of the referential data on the KOREAN EQUITIES 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 the KOREAN EQUITIES market data stream.

1.1.1. Markets

The KOREAN EQUITIES market data stream broadcasts informations about the following markets:

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

| FeedOS Market ID | Market |
|------------------|-------------------------------|
| XKRX | Korea Exchange - Stock Market |
| XKOS | KOSDAQ |

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

```
MARKETS
market # 155      CC=KR/KOREA/SEOUL, DESCR=KOREA EXCHANGE -- STOCK MARKET, WEB=sm.krx.co.kr/
webeng/
  MIC = XKRX
  TimeZone = Asia/Seoul
  Country = KR
  NbMaxInstruments = 2000000
market # 156      CC=KR/KOREA; REPUBLIC OF/SEOUL, DESCR=KOSDAQ, WEB=www.kosdaq.or.kr
  MIC = XKOS
  TimeZone = Asia/Seoul
  Country = KR
  NbMaxInstruments = 2000000
```

1.1.2. Branches

The example below shows the complete list of branches available on the KOREAN 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
{ XKRX BN   DBFXXX } qty: 3880
{ XKRX CD   EMXXXX } qty: 2
{ XKRX CD   EXXXXX } qty: 45
{ XKRX CORP DBFXXX } qty: 3418
{ XKRX CS   ESXXXX } qty: 875
{ XKRX CS   EXXXXX } qty: 30
{ XKRX FOR  ESXXXX } qty: 2
{ XKRX GO   DBFXXX } qty: 3279
{ XKRX GO   DTXXXX } qty: 41
{ XKRX INDEX TIXXXX } qty: 108
{ XKRX MF   EUXXRX } qty: 8
{ XKRX MF   EUXXXE } qty: 190
{ XKRX MF   EUXXXX } qty: 7
{ XKRX NONE DBXXXX } qty: 99
{ XKRX REPO DBFTXX } qty: 44
{ XKRX REPO DBFXXX } qty: 6
{ XKRX REPO DYFXXX } qty: 1047
{ XKRX TB   DBFTXX } qty: 294
{ XKRX WAR  RWXXCE } qty: 2938
{ XKRX WAR  RWXXPE } qty: 990
{ XKRX WAR  RWXXXX } qty: 11
{ XKOS CD   EMXXXX } qty: 2
{ XKOS CD   EXXXXX } qty: 40
{ XKOS CS   ESXXXX } qty: 1101
{ XKOS FOR  ESXXXX } qty: 9
{ XKOS INDEX TIXXXX } qty: 52
{ XKOS WAR  RWXXXX } qty: 8
```

1.2. Types of Instruments

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

- [1.2.1. Equities](#)
- [1.2.2. Bonds](#)
- [1.2.3. Indices](#)
- [1.2.4. Warrant.](#)

1.2.1. Equities

The sample below illustrates the details of an equity:

```
instr # 155/27490 = 325086050
  PriceCurrency      string{KRW}
  Symbol             string{A214320}
  Description        string{INNOCEAN}
  SecurityType       string{CS}
  FOSMarketId        XKRX
  CFICode            string{ESXXXX}
  CountryOfIssue     string{KOR}
  RoundLot           float64{1}
  InternalCreationDate Timestamp{2015-07-16 20:32:00:059}
  InternalModificationDate Timestamp{2015-07-27 21:55:01:086}
  InternalSourceId    uint16{249}
  InternalAggregationId uint16{249}
  InternalEntitlementId int32{1049}
  LocalCodeStr        string{KR7214320004}
  ISIN                string{KR7214320004}
  PriceIncrement_dynamic_TableId uint32{16318564}
  OperatingMIC         string{XKRX}
  ParValue            float64{500}
  PriceEarningRatio    float64{12.7}
```

1.2.2. Bonds

The sample below illustrates the details of a bond:

```
instr # 155/27808 = 325086368
  PriceCurrency      string{KRW}
  Symbol             string{KYONGNAM BANK19-07COUP1A-27}
  Description         string{KYONGNAM BANK19-07COUP1A-27}
  SecurityType        string{BN}
  StdMaturity         string{201607}
  FOSMarketId         XKRX
  CouponRate          float64{1.64}
  IssueDate           Timestamp{2015-07-27}
  CFICode             string{DBFXXX}
  SecurityStatus      uint8{1}
  InternalCreationDate Timestamp{2015-07-27 21:25:54:209}
  InternalModificationDate Timestamp{2015-07-27 21:55:00:962}
  InternalSourceId     uint16{249}
  InternalAggregationId uint16{249}
  InternalEntitlementId int32{1011}
  LocalCodeStr         string{KR6192521575}
  ISIN                 string{KR6192521575}
  MaturityYear          uint16{2016}
  MaturityMonth         uint8{7}
  MaturityDay           uint8{27}
  PriceIncrement_dynamic_TableId uint32{16318568}
  OperatingMIC          string{XKRX}
  CouponPaymentDate2    int32{20151027}
```

1.2.3. Indices

The sample below illustrates the details of an index:

```
instr # 155/27544 = 325086104
  PriceCurrency      string{KRW}
  Symbol             string{KTOP30-E}
  Description         string{KTOP 30 Estimated Index}
  SecurityType        string{INDEX}
  FOSMarketId         XKRX
  CFICode             string{TIXXXX}
  InternalCreationDate Timestamp{2015-07-19 23:30:00:034}
  InternalModificationDate Timestamp{2015-07-20 21:55:00:918}
  InternalSourceId     uint16{249}
  InternalAggregationId uint16{249}
  InternalEntitlementId int32{1010}
  LocalCodeStr         string{KOSPI_KTOP30EstimatedIndex_600}
  OperatingMIC          string{XKRX}
```

1.2.4. Warrant

The sample below illustrates the details of a warrant:

```
instr # 155/19152 = 325077712
  PriceCurrency      string{KRW}
  Symbol             string{J584B11}
  Description         string{HDS4B11CJ OSHOP- C}
  SecurityType       string{WAR}
  StdMaturity        string{201507}
  StrikePrice        float64{416000}
  FOSMarketId        XKRX
  CFICode            string{RWXXCE}
  CountryOfIssue     string{KOR}
  RoundLot           float64{10}
  InternalCreationDate Timestamp{2014-08-26 20:35:35:381}
  InternalModificationDate Timestamp{2015-07-24 21:55:00:841}
  InternalSourceId    uint16{249}
  InternalAggregationId uint16{249}
  InternalEntitlementId int32{1049}
  LocalCodeStr        string{KRA581183480}
  ISIN                string{KRA581183480}
  UnderlyingFOSMarketId XKOS
  UnderlyingLocalCodeStr string{KR7035760008}
  UnderlyingFOSInstrumentCode uint32{327157005}
  MaturityYear         uint16{2015}
  MaturityMonth         uint8{7}
  MaturityDay           uint8{28}
  PriceIncrement_dynamic_TableId uint32{16318567}
  OperatingMIC          string{XKRX}
```


1.3. Specific Referential Tags

The following sections describe specific referential tags or generic tags with particular values available on the KOREAN EQUITIES market data stream:

- [1.3.1. PriceCurrency.](#)

1.3.1. PriceCurrency

The values of the referential tag **PriceCurrency** conveyed on the KOREAN EQUITIES market data stream are disseminated via FeedOS data stream in *Referential* to specify the currency of the price.

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

Table 2 PriceCurrency – technical implementation in FeedOS

| Component | Value | Description |
|-----------------|----------------------------------|--|
| Tag Name | PriceCurrency | FeedOS tag name. |
| Numeric ID | 15 | 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 | <i>[Exchange Specific Value]</i> | An <i>exchange specific value</i> , specifying the currency of the price. |
| Possible Values | KRW | South Korean Won |

2. Quotation Data

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

- [2.1. Quotation Values](#)
- [2.2. Trading Status](#)
- [2.3. MBL and MBO Data.](#)

2.1. Quotation Values

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

```
InstrumentStatusL1
-- 155/2326
    BID: 3470      18
    ASK: 3535      170
    LastPrice      float64{3510}
    LastTradeQty    float64{412}
    DailyHighPrice  float64{3540}
    DailyLowPrice   float64{3510}
    DailyTotalVolumeTraded float64{9964}
    DailyTotalAssetTraded float64{35090345}
    LastTradePrice  float64{3510}
    LastTradeTimestamp Timestamp{2015-07-28 06:00:30}
    InternalDailyOpenTimestamp Timestamp{2015-07-27 22:30:00:312}
    InternalDailyCloseTimestamp Timestamp{2015-07-28 09:05:00:257}
    InternalDailyHighTimestamp Timestamp{2015-07-28 00:00:21:676}
    InternalDailyLowTimestamp Timestamp{2015-07-28 01:09:06:241}
    InternalPriceActivityTimestamp Timestamp{2015-07-28 09:05:00:257}
    LowLimitPrice   float64{2480}
    HighLimitPrice  float64{4600}
    TradingStatus    18=NotAvailableForTrading
    TradingSessionId int8{3}
    SessionTotalOffBookAssetTraded float64{0}
    SessionTotalOffBookVolumeTraded float64{0}
    PriorSessionsTotalAssetTraded float64{35090345}
    PriorSessionsTotalVolumeTraded float64{9964}
    PriorSessionsTotalOffBookAssetTraded float64{0}
    PriorSessionsTotalOffBookVolumeTraded float64{0}
    SessionTotalVolumeTraded float64{0}
    PreviousSessionClosingPrice float64{3510}
    SessionTotalAssetTraded float64{0}
    SessionClosingPrice float64{3510}
    DailyOpeningPrice float64{3540}
    DailyClosingPrice float64{3510}
    PreviousDailyTotalVolumeTraded float64{6713}
    PreviousDailyTotalAssetTraded float64{23884620}
    PreviousDailyClosingPrice float64{3540}
    PreviousBusinessDay Timestamp{2015-07-27}
    CurrentBusinessDay Timestamp{2015-07-28}
    InternalDailyClosingPriceType char{a}
    StockDividend float64{30}
    InternalLastAuctionTimestamp Timestamp{2015-07-28 05:58:19:759}
    PriceActivityMarketTimestamp Timestamp{2015-07-28 09:05:00}
    TradingReferencePrice float64{3540}
```

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** in the KOREAN 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 Trading Status of the KOREAN EQUITIES market data stream – 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 | <i>[Exchange Specific Value]</i> | An exchange specific value , as described below, concerning the characteristics of the trading status. |
| Possible Values | 5 | Price Indication |
| | 15 | New Price Indication |
| | 17 | Ready to Trade |
| | 18 | Not Available for Trading |
| | 21 | Pre-Open |

2.3. MBL and MBO Data *

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

3. Closing Price

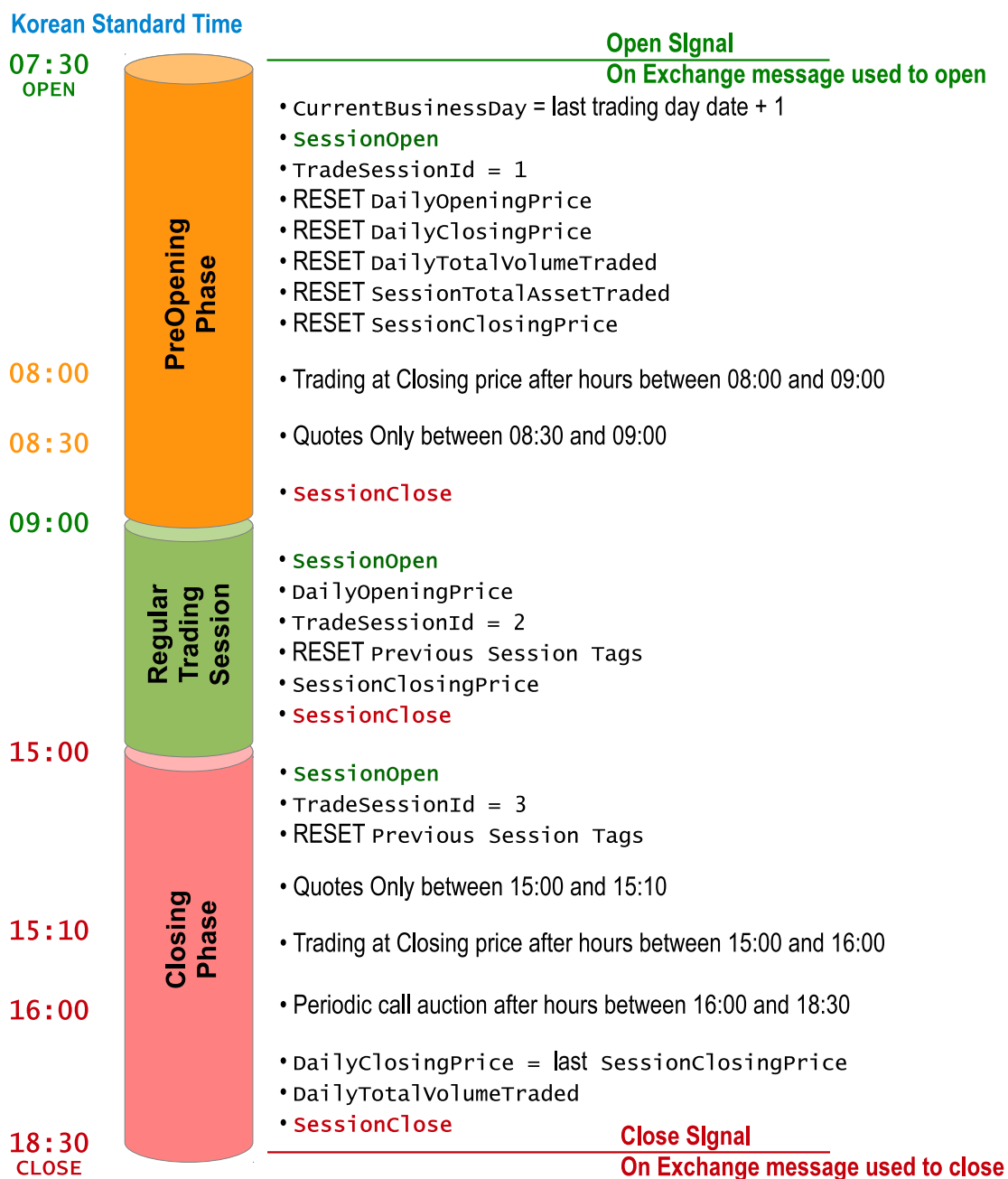
The closing price is the last trade price upon close. There is no settlement price.

4. Extended-Session Kinematics

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

* 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.

Figure 1 Example of tags update mechanism for an Equity on the KOREAN EQUITIES market data stream



5. Special Behavior

The following section describe the special behavior of the KOREAN EQUITIES market data stream:

- [5.1. Level1 Market Data Kinematics – TradingStatus at the Beginning of the G3 Board](#)

5.1. Level1 Market Data Kinematics – TradingStatus at the Beginning of the G3 Board

In the Level1 Market Data Kinematics **before 2014-11-17**, when the G3 board begins at 06:00 UTC (15:00 Local Time), the Trading Status of the Single Price of the G3 board is 5=Price Indication, as shown below:

```
"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"

VU 05:59:56:331 325060233 LastAuctionVolume=45268
TE 05:59:56:868 325060233 * * * * 1264000 6550
TE 05:59:57:404 325060233 * * * * 1264000 6552
TE 05:59:57:558 325060233 * * * * 1264000 7052
TE 05:59:57:842 325060233 * * * * 1264000 7053
TE 05:59:58:076 325060233 * * * * 1264000 7054
TE 05:59:58:564 325060233 * * * * 1264000 7074
TE 05:59:59:878 325060233 * * 1262000 3 * *
TE 06:00:00:592 325060233 * * * * * * C
VU 06:00:00:592 325060233 TradingStatus=18
VU 06:00:00:670 325060233 TradingStatus=5
TE 06:00:02:397 325060233 1264000 45268 * * * *
VU 06:00:02:398 325060233 SessionClosingPrice=1264000
InternalDailyClosingPriceType=a
VU 06:00:02:410 325060233 LastAuctionPrice=? LastAuctionVolume=?
TE 06:10:00:331 325060233 1264000 701 * * * * ohl
VU 06:10:00:331 325060233 TradingSessionId=3 TradingStatus=17
TE 06:10:05:957 325060233 1264000 3 * * * *
```

In the Level1 Market Data Kinematics **after 2014-11-17**, when the G3 board begins at 06:00 UTC (15:00 Local Time), the Trading Status of the Single Price of the G3 board is 21=PreOpen, as shown below:

```
"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"

VU 05:59:56:331 325060233 LastAuctionVolume=45268
TE 05:59:56:868 325060233 * * * * 1264000 6550
TE 05:59:57:404 325060233 * * * * 1264000 6552
TE 05:59:57:558 325060233 * * * * 1264000 7052
TE 05:59:57:842 325060233 * * * * 1264000 7053
TE 05:59:58:076 325060233 * * * * 1264000 7054
TE 05:59:58:564 325060233 * * * * 1264000 7074
TE 05:59:59:878 325060233 * * 1262000 3 * *
TE 06:00:00:592 325060233 * * * * * * C
VU 06:00:00:592 325060233 TradingStatus=18
VU 06:00:00:670 325060233 TradingStatus=21
TE 06:00:02:397 325060233 1264000 45268 * * * *
VU 06:00:02:398 325060233 SessionClosingPrice=1264000
InternalDailyClosingPriceType=a
VU 06:00:02:410 325060233 LastAuctionPrice=? LastAuctionVolume=?
TE 06:10:00:331 325060233 1264000 701 * * * * ohl
VU 06:10:00:331 325060233 TradingSessionId=3 TradingStatus=17
TE 06:10:05:957 325060233 1264000 3 * * * *
```

6. 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>.