S&P Capital IQ Real-Time Solutions

QuantFEED® Feed Description

OSE DERIVATIVES Feed

Reference n°: 19881 – 19788 – 20140515

S&P Capital IQ Real-Time Solutions (QuantHouse®) – QuantFEED®
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Reference 19881 – 19788 – 20140515
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QUANTFEED® OSE 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 OSE DERIVATIVES market data stream, their possible values and current QuantFEED® technical implementation.

The topics this feed description covers include:

1. Referential Data

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

1.1. Available Markets and Branches

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

1.1.1. Markets

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

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

QuantFEED® Market ID	Market
XOSE	Osaka Securities Exchange

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

```
MARKETS
market # 140    CC=JP/JAPAN/OSAKA,DESCR=OSAKA SECURITIES EXCHANGE,WEB=www.ose.or.jp
    MIC = XOSE
    TimeZone = Asia/Tokyo
    Country = Jp
    NbMaxInstruments = 2000000
```

1.1.2. Branches

The example below shows the complete list of branches available on the OSE 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
    { XOSE CS    EXXXXX } qty: 207
    { XOSE FUT   FFDCXX } qty: 12
    { XOSE FUT   FFICXX } qty: 111
    { XOSE INDEX TIXXXX } qty: 74
    { XOSE MLEG SXXXXX } qty: 140
    { XOSE OPT   OCADCX } qty: 113
    { XOSE OPT   OCEICX } qty: 1436
    { XOSE OPT   OCESPX } qty: 11630
    { XOSE OPT   OPADCX } qty: 113
    { XOSE OPT   OPEICX } qty: 1436
    { XOSE OPT   OPESPX } qty: 11630
```

1.2. Types of Instruments

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

1.2.1. Cash

The sample below illustrates the details of a cash instrument:

```
instr # 140/1001222 = 294602502
    PriceCurrency               string{JPY}
    Symbol                      string{9983}
    Description                 string{FAST RETAILING}
    SecurityType                string{CASH}
    FOSMarketId                 XOSE
    Factor                      float64{1}
    CFICode                     string{EXXXXX}
    RoundLot                    float64{1}
    LotType                     uint8{2}
    InternalCreationDate        Timestamp{2014-01-09 06:06:02:786}
    InternalModificationDate    Timestamp{2014-05-13 22:15:38:862}
    InternalSourceId            uint16{247}
    LocalCodeStr                string{SPO_9983}
    ISIN                        string{JP3802300008}
    PriceIncrement_static       float64{0.01}
    OperatingMIC                string{XJPX}
    SegmentMIC                  string{XOSE}
```

1.2.2. Indices

The sample below illustrates the details of an index:

```
instr # 140/1023395 = 294624675
    PriceCurrency               string{JPY}
    Symbol                      string{840Q}
    Description                 string{TOPIX Core30 Dividend SQ}
    SecurityType                string{INDEX}
    FOSMarketId                 XOSE
    Factor                      float64{1}
    CFICode                     string{TIXXXX}
    RoundLot                    float64{1}
    LotType                     uint8{2}
    InternalCreationDate        Timestamp{2014-03-23 22:17:09:571}
    InternalModificationDate    Timestamp{2014-05-13 22:17:06:996}
    InternalSourceId            uint16{247}
    LocalCodeStr                string{SPF_TP30DQ}
    PriceIncrement_static       float64{0.01}
    OperatingMIC                string{XJPX}
    SegmentMIC                  string{XOSE}
```

1.2.3. Futures

The sample below illustrates the details of a future:

```
instr # 140/1023454 = 294624734
    PriceCurrency               string{JPY}
    Symbol                      string{169090007}
    Description                 string{mini 10-year JGB}
    SecurityType                string{FUT}
    StdMaturity                 string{201409}
    FOSMarketId                 XOSE
    Factor                      float64{100000}
    CFICode                     string{FFDCXX}
    RoundLot                    float64{1}
    LotType                     uint8{2}
    MaxTradeVol                 float64{3000}
    InternalCreationDate        Timestamp{2014-03-23 22:17:09:583}
    InternalModificationDate    Timestamp{2014-05-13 22:17:09:421}
    InternalSourceId            uint16{247}
    LocalCodeStr                string{FUT_JGBLM_1409}
    PriceIncrement_static       float64{0.005}
    UnderlyingLocalCodeStr      string{JGBLM}
    MaturityYear                uint16{2014}
    MaturityMonth               uint8{9}
    MaturityDay                 uint8{9}
    OperatingMIC                string{XJPX}
    SegmentMIC                  string{XOSE}
```

1.2.4. Multilegs

The sample below illustrates the details of a multileg:

```
instr # 140/1030154 = 294631434
    PriceCurrency               string{JPY}
    Description                 string{NIKKEI VI}
    SecurityType                string{MLEG}
    FOSMarketId                 XOSE
    CFICode                     string{SXXXXX}
    NbLegs                      uint8{2}
    RoundLot                    float64{1}
    LotType                     uint8{2}
    MaxTradeVol                 float64{5000}
    InternalCreationDate        Timestamp{2014-05-13 22:17:27:791}
    InternalModificationDate    Timestamp{2014-05-13 22:17:27:791}
    InternalSourceId            uint16{247}
    LocalCodeStr                string{FCAL_NKVI_1406/1412}
    PriceIncrement_static       float64{0.01}
    UnderlyingLocalCodeStr      string{NKVI}
    MaturityYear                uint16{2014}
    MaturityMonth               uint8{6}
    MaturityDay                 uint8{10}
    OperatingMIC                string{XJPX}
    SegmentMIC                  string{XOSE}
    LegFOSInstrumentCode        uint32{294625779}
    LegFOSInstrumentCode_1      uint32{294602294}
    LegRatioQty                 float64{1}
    LegRatioQty_1               float64{1}
    LegFIXSide                  '1'=Buy
    LegFIXSide_1                '2'=Sell
```

1.2.5. Options

The sample below illustrates the details of an option:

```
instr # 140/1027517 = 294628797
    PriceCurrency               string{JPY}
    Symbol                      string{129079901}
    Description                 string{10-year JGB}
    SecurityType                string{OPT}
    StdMaturity                 string{201407}
    StrikePrice                 float64{149.5}
    FOSMarketId                 XOSE
    Factor                      float64{1000000}
    CFICode                     string{OCADCX}
    RoundLot                    float64{1}
    LotType                     uint8{2}
    MaxTradeVol                 float64{2000}
    InternalCreationDate        Timestamp{2014-04-30 07:31:16:830}
    InternalModificationDate    Timestamp{2014-05-13 22:17:09:422}
    InternalSourceId            uint16{247}
    LocalCodeStr                string{CAL_JGBL_1407_149.50}
    PriceIncrement_static       float64{0.01}
    UnderlyingLocalCodeStr      string{JGBL}
    MaturityYear                uint16{2014}
    MaturityMonth               uint8{6}
    MaturityDay                 uint8{30}
    OperatingMIC                string{XJPX}
    SegmentMIC                  string{XOSE}
```

1.3. Referential Tags

The section below describe the specific referential tags available on the OSE DERIVATIVES market data stream:

1.3.1. Operating MIC and Segment MIC

The values of the referential tags **Operating MIC** and **Segment MIC** conveyed on the OSE DERIVATIVES market data stream are disseminated via QuantFEED® data stream in *Referential* to specify the parent and child MIC.

QuantFEED® implementation of the values currently available for the tag `OperatingMIC` and `SegmentMIC` is described in the table below:

Table 2 OperatingMIC and SegmentMIC – technical implementation in QuantFEED®

Component	Value		Description
Tag Name	`OperatingMIC`	`SegmentMIC`	QuantFEED® tag name.
Numeric ID	9533	9534	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	`String`	`String`	String data type.
Format	*`[Exchange Specific Value]`*	*`[Exchange Specific Value]`*	An ***exchange specific value***, specifying the parent and child MICs.
Possible Values	XJPX	XOSE	Osaka Securities Exchange

2. Quotation Data

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

2.1. Quotation Values

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

```
InstrumentStatusL1
-- 140/1023454
        BID: 144.565    0       *NO ORDER*
        ASK: 146        1
        InternalDailyOpenTimestamp      Timestamp{2014-05-14 06:30:00:897}
        InternalDailyCloseTimestamp     Timestamp{2014-05-14 06:07:00:899}
        InternalPriceActivityTimestamp  Timestamp{2014-05-14 07:04:49:006}
        LowLimitPrice                   float64{142.81}
        HighLimitPrice                  float64{146.81}
        TradingStatus                   17=ReadyToTrade
        TradingSessionId                int8{1}
        SessionTotalOffBookAssetTraded  float64{0}
        SessionTotalOffBookVolumeTraded float64{0}
        SessionTotalVolumeTraded        float64{0}
        SessionTotalAssetTraded         float64{0}
        PreviousBusinessDay             Timestamp{2014-05-14}
        CurrentBusinessDay              Timestamp{2014-05-15}
        PreviousDailySettlementPrice    float64{144.81}
        MARKET_OSE_TradingStateName     string{N_ZARABA}
```

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** conveyed on the OSE 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 OSE 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.
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
	16	Trade Dissemination Time
	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 OSE DERIVATIVES market data stream:

- 2.3.1. Trade Conditions
- 2.3.2. Other Values.

2.3.1. Trade Conditions

The following subsections describe the trade conditions available on the on the OSE DERIVATIVES market data stream:

- 2.3.1.1. MARKET_OSAKA_TradeCondition
- 2.3.1.2. MARKET_OSAKA_TradeSource
- 2.3.1.3. MARKET_OSAKA_JNetTradingType.

2.3.1.1. MARKET_OSAKA_TradeCondition

The values of the quotation tag **MARKET_OSAKA_TradeCondition** conveyed on the OSE DERIVATIVES market data stream are disseminated via QuantFEED® data stream in *Context* to identify a particular condition applicable to the trade:

- 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_OSAKA_TradeCondition` is described in the table below:

Table 4 MARKET_OSAKA_TradeCondition – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`MARKET_OSAKA_TradeCondition`	QuantFEED® tag name.
Numeric ID	`16050`	QuantFEED® unique ID disseminated on 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***, detailing a particular condition applicable to the trade.
Possible Values	`<Empty>`	Normal Trade, trade price matches both order prices. Default value, not sent.
	`1`	Late Trade
	`2`	Internal Trade
	`4`	Bulletin Board
	`8`	Buy Write
	`16`	Trade Off Market

2.3.1.2. MARKET_OSAKA_TradeSource

The values of the quotation tag **MARKET_OSAKA_TradeSource** conveyed on the OSE DERIVATIVES market data stream are disseminated via QuantFEED® data stream in *Context* to identify the source of the trade:

- 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_OSAKA_TradeSource` is described in the table below:

Table 5 MARKET_OSAKA_TradeSource – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`MARKET_OSAKA_TradeSource`	QuantFEED® tag name.
Numeric ID	`16051`	QuantFEED® unique ID disseminated on 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***, identifying the source of the trade.
Possible Values	`3`	JNET_DifferentParticipants
	`5`	JNET_SameParticipant
	`7`	Combination Order
	`20`	Itayose Auction

2.3.1.3. MARKET_OSAKA_JNetTradingType

The values of the quotation tag **MARKET_OSAKA_JNetTradingType** conveyed on the OSE DERIVATIVES market data stream are disseminated via QuantFEED® data stream in *Context* to identify the type of J-Net trading:

- 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_OSAKA_JNetTradingType` is described in the table below:

Table 6 MARKET_OSAKA_JNetTradingType – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`MARKET_OSAKA_JNetTradingType`	QuantFEED® tag name.
Numeric ID	`16052`	QuantFEED® unique ID disseminated on S&P Capital IQ Real-Time Solutions data stream. This is the numeric equivalent of the tag name.
Type	`String`	String data type.
Format / Possible Values	*`[Exchange Specific Value]`*	An ***exchange specific value***, identifying the type of J-Net trading.

2.3.2. Other Values

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

- 2.3.2.1. MARKET_OSE_TradingStateName

2.3.2.1. MARKET_OSE_TradingStateName

Each time a modification of the trading state occurs, the values of the quotation tag **MARKET_OSE_TradingStateName** conveyed on the OSE 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 `MARKET_OSE_TradingStateName` is described in the table below:

Table 7 MARKET_OSE_TradingStateName – technical implementation in QuantFEED®

Component	Value	Description
Tag Name	`MARKET_OSE_TradingStateName`	QuantFEED® tag name.
Numeric ID	`14755`	QuantFEED® unique ID disseminated on 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***, detailing the current state of the trade.
MORNING SESSION		

Table 7 MARKET_OSE_TradingStateName – technical implementation in QuantFEED® (Continued)

Component	Value	Description	
Possible Values	M_PRE_OPEN_NO_J-NET	FIXSecurityTradingStatus_PreOpen	Start of order receipt.
	M_PRE_OPEN	FIXSecurityTradingStatus_PreOpen	Start of J-NET trading.
	M_ZARABA	FIXSecurityTradingStatus_ReadyToTrade	Start of the day session.
	M_PRE_CLOSE	FIXSecurityTradingStatus_PriceIndication	Start of pre-closing the morning session period.
	M_AUCTION_CLOSING	FIXSecurityTradingStatus_TradeDisseminationTime	Itayose the morning session at closing.
	M_AUCTION_CLOSING2	FIXSecurityTradingStatus_NotAvailableForTrading	Message for internal control.
	M_AUCTION_END	FIXSecurityTradingStatus_NotAvailableForTrading	End of output of execution notice for the morning session.
AFTERNOON SESSION			
Possible Values	A_PRE_OPEN	FIXSecurityTradingStatus_PreOpen	Start of order receipt for the afternoon session.
	A_ZARABA	FIXSecurityTradingStatus_ReadyToTrade	Start of the afternoon session.
	A_PRE_CLOSE	FIXSecurityTradingStatus_PriceIndication	Start of pre-closing period.
	A_AUCTION_CLOSING	FIXSecurityTradingStatus_TradeDisseminationTime	Itayose at closing.
	A_AUCTION_CLOSING2	FIXSecurityTradingStatus_NotAvailableForTrading	Message for internal control.
	A_AUCTION_END	FIXSecurityTradingStatus_NotAvailableForTrading	End of output of execution notice for the day session.
	A_CALC_SP	FIXSecurityTradingStatus_NotAvailableForTrading	Message for internal control.
	A_COLLECT_TRADE	FIXSecurityTradingStatus_NotAvailableForTrading	Message for internal control.
END OF THE TRADING DAY			
Possible Values	J-NET_END	FIXSecurityTradingStatus_NotAvailableForTrading	End of J-NET trading. Invalidation of non-remaining days order.
	DAY_END	FIXSecurityTradingStatus_NotAvailableForTrading	End of output of execution notice for JNET trading Transition of date.
	ORDER_REMOVE	FIXSecurityTradingStatus_NotAvailableForTrading	Expiration of GTD/GTC orders that are not within price limit range.
NIGHT SESSION			

Table 7 MARKET_OSE_TradingStateName – technical implementation in QuantFEED® (Continued)

Component	Value	Description	
Possible Values	N_PRE_OPEN	FIXSecurityTradingStatus_ PreOpen	Start of order receipt for night session. Start of J-NET trading.
	N_ZARABA	FIXSecurityTradingStatus_ ReadyToTrade	Start of trading in the night session. Start of J-NET trading.
	N_PRE_CLOSE	FIXSecurityTradingStatus_ PriceIndication	Start of pre-closing period.
	N_AUCTION_CLOSING	FIXSecurityTradingStatus_ NotAvailableForTrading	Itayose at closing. End of J-NET trading.
	N_AUCTION_CLOSING2	FIXSecurityTradingStatus_ NotAvailableForTrading	Message for internal control.
	N_AUCTION_END	FIXSecurityTradingStatus_ NotAvailableForTrading	End of output of execution notice for the night session.
	N_CLOSE	FIXSecurityTradingStatus_ NotAvailableForTrading	Deletion of messages
END OF ONLINE SERVICES			
Possible Values	CLOSE	FIXSecurityTradingStatus_ NotAvailableForTrading	End of online service
MARKET SESSION STATUS HANDLING			
Possible Values	PEND_CLS	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading and J-NET – Pending Close
	PEND	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading and J-NET – Pending
	ALL_HALT	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading and J-NET – All Halts
	NO_ORD_HALT	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading and J-NET – No Order/Halt
	HALT	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading and Stop J-NET – Halt
	J-NET_HALT_NO_ORDERS	FIXSecurityTradingStatus_ TradingHalt	Stop J-NET – No Orders
	J-NET_HALT_PRE_M_CL	FIXSecurityTradingStatus_ TradingHalt	Stop J-NET – PreClose Day Session/Close
	PEND_CLS	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading – Pending/Close
	PEND	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading – Pending
	PEND_CLS_NO_J-NET	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading – Pending/Close, No J-NET
	PEND_NO_J-NET	FIXSecurityTradingStatus_ TradingHalt	Stop Continuous Trading – Pending, No J-NET
	J-NET_HALT_CLS	FIXSecurityTradingStatus_ TradingHalt	Stop J-NET – Close

Table 7 MARKET_OSE_TradingStateName – technical implementation in QuantFEED® (Continued)

Component	Value	Description	
Possible Values	J-NET_HALT_N_ZARABA	FIXSecurityTradingStatus_TradingHalt	Stop J-NET – Night Session
	J-NET_HALT_A_ZARABA	FIXSecurityTradingStatus_TradingHalt	Stop J-NET – Afternoon Session
	J-NET_HALT_M_ZARABA	FIXSecurityTradingStatus_TradingHalt	Stop J-NET – Day Session
	J-NET_HALT_PRE_A_CL	FIXSecurityTradingStatus_TradingHalt	Stop J-NET – PreClose Afternoon Session
	J-NET_HALT_PRE_N_CL	FIXSecurityTradingStatus_TradingHalt	Stop J-NET – PreClose Night Session
	J-NET_HALT_PRE_OPN	FIXSecurityTradingStatus_TradingHalt	Stop J-NET – PreOpen
	SCB	FIXSecurityTradingStatus_TradingHalt	Static Circuit Breaker
	DCB	FIXSecurityTradingStatus_TradingHalt	Dynamic Circuit Breaker

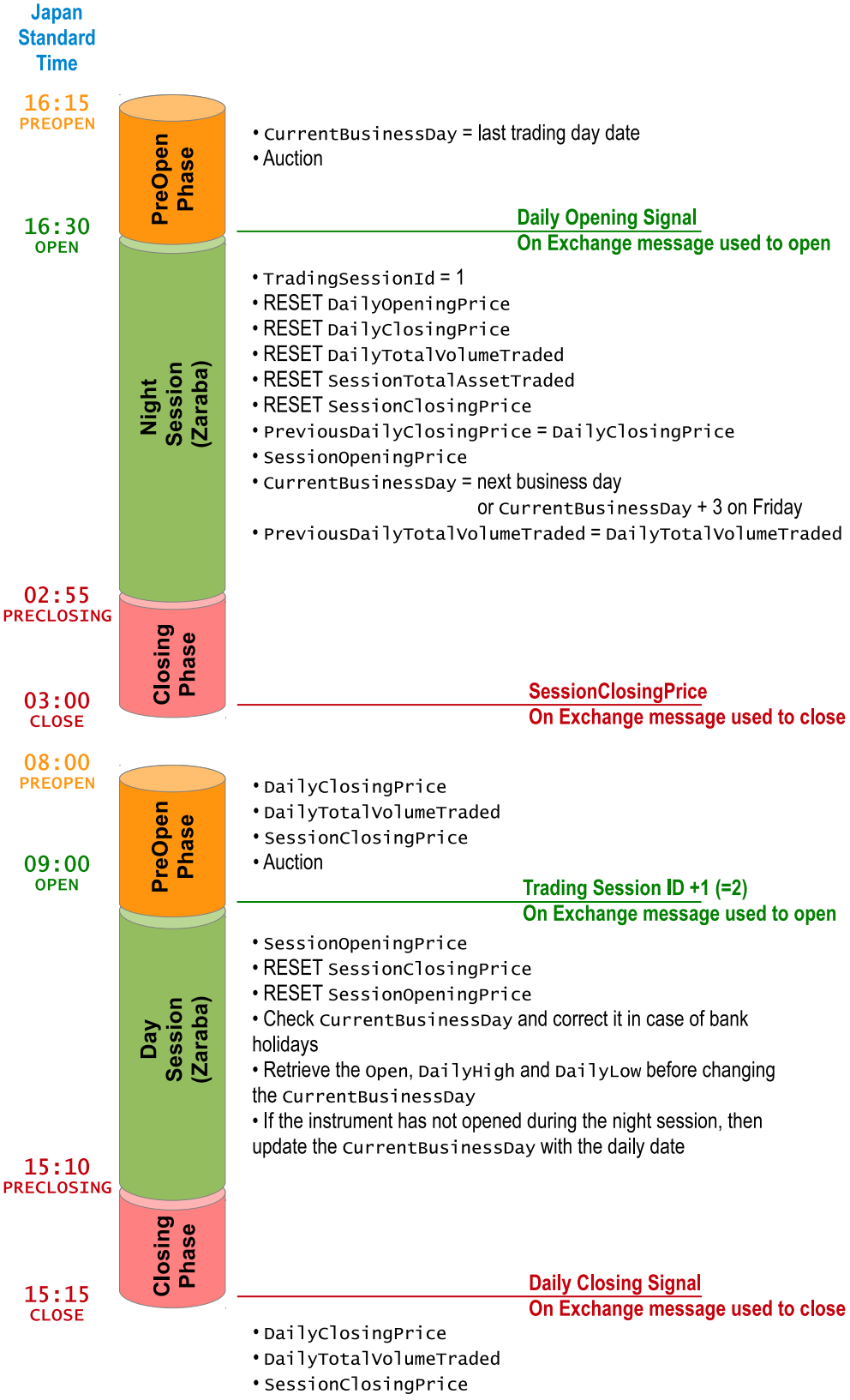
3. Official Closing Price

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. Multi-Session Kinematics

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

Figure 7-1 Example of the update mechanism of the tags on the OSE DERIVATIVES market data stream during a regular trading day, in Japan Standard Time



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.