S&P Capital IQ Real-Time Solutions

QuantFEED® Feed Description

MONTREAL Feed

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QUANTFEED® MONTREAL 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 MONTREAL 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. Multi-Session Kinematics
- 5. Finding the Latest Information.

1. Referential Data

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

1.1.1. Markets

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

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

QuantFEED® Market ID	Market
XMOD	The Montreal Exchange

The following example shows the complete list of markets available on the MONTREAL 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 MONTREAL market data stream for each market, returned by the dumps command. 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 MONTREAL market data stream, according to their type:

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

1.2.1. Futures

The sample below illustrates the details of a future:

```
instr \# 43/81809 = 90259345
   PriceCurrency
                                string{USD}
   Symbol
                                string{EMF}
   SecurityType
                                string{FUT}
                                string{201409}
   StdMaturity
   FOSMarketId
                                XMOD
   CFTCode
                                string{FFIXXX}
   InternalCreationDate
                                Timestamp{2014-06-10 06:00:02:216}
   InternalModificationDate
                                Timestamp{2014-06-10 06:00:02:216}
   InternalSourceId
                                uint16{22}
   LocalCodeStr
                                string{EMFU4}
   PriceIncrement_static
                                float64{0.05}
   MaturityYear
                                uint16{2014}
   MaturityMonth
                                uint8{9}
   MaturityDay
                                uint8{19}
   SecurityTradingId
                                string{EMFU14}
   MBLLayersDesc
                                string{0,1}
   OperatingMIC
                                string{XMOD}
```

1.2.2. Multilegs

The sample below illustrates the details of a multileg:

```
instr \# 43/83035 = 90260571
   Svmbol
                                string{DGC_UDS_ESMSL0}
                                string{+01DGC 140621C12.50-01DGC 140719C13.00}
   Description
                                string{MLEG}
   SecurityType
                                string{201406}
   StdMaturity
   FOSMarketId
                                XMOD
   CFICode
                                string{SXXXXX}
   NbLeas
                                uint8{2}
   InternalCreationDate
                                Timestamp{2014-06-18 14:41:05:035}
   InternalModificationDate
                                Timestamp{2014-06-18 14:41:05:035}
   InternalSourceId
                                uint16{22}
   LocalCodeStr
                                string{DGC_UDS_ESMSL0}
   PriceIncrement_static
                                float64{0.01}
   MaturityYear
                                uint16{2014}
   MaturityMonth
                                uint8{6}
   MaturityDay
                                uint8{21}
                                string{DGC_UDS_ESMSL0}
   SecurityTradingId
   MBLLayersDesc
                                string{0,1}
   OperatingMIC
                                string{XMOD}
   LegFOSInstrumentCode
                                uint32{90252894}
   {\tt LegFOSInstrumentCode\_1}
                                uint32{90239403}
   LegRatioQty
                                float64{1}
   LegRatioQty_1
                                float64{1}
   LegFIXSide
                                '1'=Buy
   LegFIXSide_1
                                '2'=Sell
```

1.2.3. Options

The sample below illustrates the details of an option:

```
instr \# 43/82732 = 90260268
   PriceCurrency
                               string{CAD}
   Symbol
                               string{OBZ}
   SecurityType
                               string{OOF}
   StdMaturity
                               string{201506}
   StrikePrice
                               float64{96.75}
   FOSMarketId
                               XMOD
   CFICode
                               string{OCXFXX}
   StrikeCurrency
                               string{CAD}
   InternalCreationDate
                               Timestamp{2014-06-17 06:00:03:219}
   InternalModificationDate Timestamp{2014-06-17 06:00:03:219}
   InternalSourceId
                              uint16{22}
                               string{OBZM5C00967503}
   LocalCodeStr
   UnderlyingLocalCodeStr
MaturityYear
                              string{BAX}
                               uint16{2015}
   MaturityMonth
                               uint8{6}
   MaturityDay
                               uint8{12}
   PriceIncrement_dynamic_TableId
                                       uint32{1441895}
   SecurityTradingId string{OBZM15C9675}
   MBLLayersDesc
                               string{0,1}
                               string{XMOD}
   OperatingMIC
```

2. Quotation Data

The following sections describe the characteristics of the quotation data on the MONTREAL 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 MONTREAL market data stream:

```
InstrumentStatusL1
-- 43/81809
       BID: 513.45
                                *NO ORDER*
       ASK: 514.4
                                *NO ORDER*
       LastPrice
                                        float64{514.9}
                                        float64{1}
       LastTradeQty
       DailyHighPrice
                                        float64{513.9}
       DailyLowPrice
                                        float64{513.9}
       DailyTotalVolumeTraded
                                        float64{1}
       DailyTotalAssetTraded
                                        float64{513.9}
       LastTradePrice
                                        float64{513.9}
       LastTradeTimestamp
                                        Timestamp{2014-06-23 18:33:00}
       InternalDailyOpenTimestamp
                                       Timestamp{2014-06-23 10:00:00:030}
       InternalDailyCloseTimestamp
                                       Timestamp{2014-06-23 21:10:02:774}
       InternalDailyHighTimestamp
                                        Timestamp{2014-06-23 18:33:00:422}
       InternalDailyLowTimestamp
                                        Timestamp{2014-06-23 18:33:00:422}
       InternalPriceActivityTimestamp Timestamp{2014-06-24 06:00:11:445}
       LowLimitPrice
                                        float64{459.9}
       HighLimitPrice
                                        float64{569.9}
       TradingStatus
                                        18=NotAvailableForTrading
       DailyOpeningPrice
                                        float64{513.9}
       DailyClosingPrice
                                        float64{514.9}
       DailySettlementPrice
                                        float64{514.9}
       PreviousDailyTotalVolumeTraded float64{11}
       PreviousDailyTotalAssetTraded float64{5647.4}
       PreviousDailyClosingPrice
                                        float64{514.95}
       PreviousBusinessDay
                                        Timestamp{2014-06-20}
       CurrentBusinessDay
                                       Timestamp{2014-06-23}
       PreviousDailySettlementPrice
                                        float64{514.95}
        PriceActivityMarketTimestamp
                                        Timestamp{2014-06-23 18:33:00}
```

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 MONTREAL 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 2 Trading Status of the MONTREAL 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.
Possible Values	2	Trading Halt
	5	Price Indication
	17	Ready to Trade
	18	Not Available for Trading
	21	Pre-Open

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 MONTREAL market data stream:

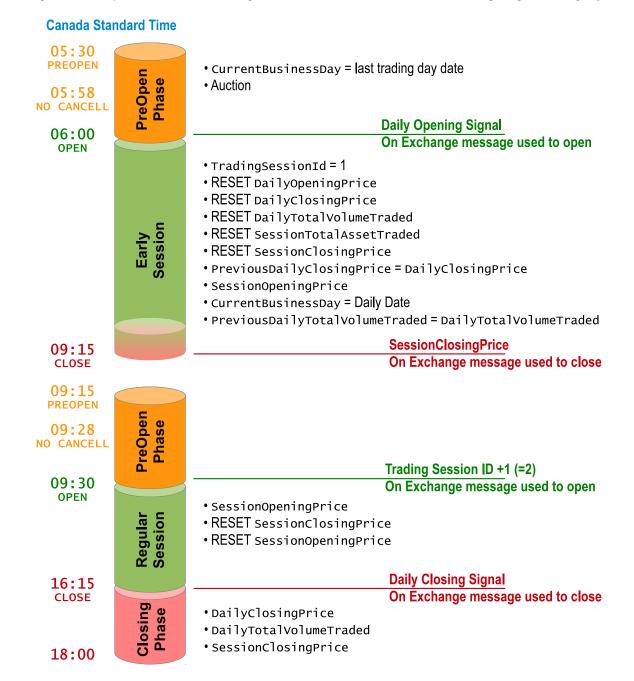


Figure 2-1 Update mechanism of the tags on the MONTREAL market data stream during a regular trading day

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.