

# **FeedOS™ Developer's Notice**

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## **Milan Data Feed Migration to MilleniumIT**

Reference n°: 20120619

Effective as of: **25 June 2012**

Action required from users: **Mandatory**



QuantHouse® FeedOS™  
FeedOS™ Developer's Notice  
Reference 20120619  
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# MILAN DATA FEED MIGRATION TO MILLENIUMIT

To reflect the changes caused by the migration of the Borsa Italiana market data stream to the MilleniumIT format, QuantHouse® has decided to enhance the content of QuantFEED®. The changes also require customers using Milan Data Feed for replay purposes to upgrade their FeedOS™ API.

This developer's notice contains late-breaking information about the implementation of this modification in your applications, which may not be included otherwise in the published documentation. The topics this notice covers include:

- [1. Update Summary](#)
- [2. Functional Description](#)
- [3. QuantFEED® Technical Implementation](#)
- [5. Finding the Latest Information.](#)

## 1. Update Summary

Table 1 Current update summary

Notice Reference	20120619
Scope	Reference Data
Exchanges	Borsa Italiana – Milan Data Feed
Effective Date	<b>2012-06-25</b>
Impact	<ul style="list-style-type: none"><li>• Update of the Referential and Quotation Tags</li><li>• FeedOS™ API Upgrade for Feed Replay</li></ul>
Action required	Mandatory

## 2. Functional Description

Starting **June 25, 2012**, QuantHouse® changes the content of **LocalCodeStr** referential tag to accommodate the information disseminated on Milan Data Feed, following the migration to the MilleniumIT format.

Moreover, on the market type MOTX, the referential tag **Symbol** (**NumericID:** 55, **Type:** String) is no longer disseminated.

Two new quotation tags – **MARKET\_MILAN\_MIT\_TradingStatusDetails** and **MARKET\_LSE\_MIT\_Halt\_Reason** – are now available in QuantFEED®’s Level 1 Data Stream to detail the trading status, while the quotation tag **TradingStatus** (NumericID: 9100, Type: Enum) has different possible values.

Furthermore, one new quotation context tag **MARKET\_MILAN\_MIT\_AuctionTypeIndicator** (NumericID: 16350, Type: char) will be disseminated in QuantFEED®’s Level 1 Data Stream to detail the type of auction.

### 3. QuantFEED® Technical Implementation

The following sections describe the technical implementation of the new or updated tags:

- [3.1. Technical Implementation of the Referential Tags](#)
- [3.2. Technical Implementation of the Quotation Tags.](#)

#### 3.1. Technical Implementation of the Referential Tags

The tag LocalCodeStr is disseminated via QuantHouse®’s data stream in *Referential*, when new details about the instrument and market are available.

QuantFEED® implementation of the tag LocalCodeStr is described in the following table:

**Table 2**      **Borsa Italiana LocalCodeStr technical implementation in QuantFEED®**

Component	Value	Description
Tag Name	LocalCodeStr	QuantFEED® tag name.
Numeric ID	9500	QuantFEED® unique ID disseminated on QuantHouse®’s data stream. This is the numeric equivalent of the tag name.
Type	String	String data type.
Format / Possible Values	<i>[Exchange specific value]</i>	An <b>exchange specific value</b> concerning the local code. For more details, see section <a href="#">2. Functional Description on page 1</a> .

Below is an example of the previous and current tag implementation in the Borsa Italiana’s market data stream:

**Affari Old Version**

```

instr # 285/1603 = 597689923
  PriceCurrency      string{EUR}
  Symbol             string{WMEF13}
  Issuer             string{MERIDIANA FLY}
  Description        string{MERIDIANA FLY WARR MERIDIANA FLY 2012-2013}
  SecurityType       string{WAR}
  StrikePrice        float64{1.275}
  FOSMarketId        MTAA
  CFICode            string{RWXXXX}
  RoundLot           float64{1}
  MinTradeVol        float64{1}
  SecuritySubType    string{WR}
  InternalCreationDate Timestamp{2012-04-12 16:18:09:467}
  InternalModificationDate Timestamp{2012-06-05 04:15:22:252}
  InternalSourceId    uint16{30}
  LocalCodeStr       string{IT_IT0004785272}
  ISIN               string{IT0004785272}
  MaturityYear        uint16{2013}
  MaturityMonth        uint8{5}
  MaturityDay          uint8{31}
  PriceIncrement_dynamic_TableId uint32{1966182}
  MARKET_LSE_NormalMarketSize float64{45000}
  MARKET_LSE_SectorCode string{I1S}
  MARKET_LSE_SegmentCode string{MB1}

```

**Affari New Version**

```

instr # 285/1603 = 597689923
  PriceCurrency      string{EUR}
  Symbol             string{WMEF13}
  Issuer             string{MERIDIANA FLY}
  Description        string{WARR MERIDIANA FLY 2012-2013}
  SecurityType       string{WAR}
  StrikePrice        float64{1.275}
  FOSMarketId        MTAA
  CFICode            string{RWXXXX}
  RoundLot           float64{1}
  MinTradeVol        float64{1}
  SecuritySubType    string{WR}
  InternalCreationDate Timestamp{2012-06-07 14:28:24:407}
  InternalModificationDate Timestamp{2012-06-07 14:28:24:407}
  InternalSourceId    uint16{3}
  LocalCodeStr       string{714225}
  ISIN               string{IT0004785272}
  MaturityYear        uint16{2013}
  MaturityMonth        uint8{5}
  MaturityDay          uint8{31}
  PriceIncrement_dynamic_TableId uint32{1966182}
  MARKET_LSE_NormalMarketSize float64{45000}
  MARKET_LSE_SectorCode string{I1S}
  MARKET_LSE_SegmentCode string{MB1}

```

Moreover, the referential tag Symbol (NumericID: 55, Type: String) of the MOTX market type is removed, as illustrated in the example below:

**MOTX Old Version**

```

instr # 36/1000 = 75498472
  PriceCurrency      string{ITL}
  Symbol             string{B20C}
  Issuer             string{INTESA SANPAOLO}
  Description         string{INTESA SANPAOLO SPAOLO-CF O      6%}
  SecurityType       string{NONE}
  FOSMarketId        MOTX
  CFICode            string{DBFXXX}
  RoundLot           float64{5000000}
  MinTradeVol        float64{5000000}
  SecuritySubType     string{FX}
  InternalCreationDate Timestamp{2009-12-07 05:15:02:472}
  InternalModificationDate Timestamp{2012-06-08 04:16:18:748}
  InternalSourceId    uint16{30}
  InternalAggregationId uint16{30}
  LocalCodeStr        string{IT_IT0000018546}
  ISIN               string{IT0000018546}
  PriceIncrement_static float64{0.001}
  MaturityYear        uint16{2013}
  MaturityMonth       uint8{10}
  MaturityDay         uint8{1}
  MARKET_LSE_NormalMarketSize float64{50000000}
  MARKET_LSE_SectorCode string{ICC}
  MARKET_LSE_SegmentCode string{DMO}

```

**MOTX New Version**

```

instr # 36/1000 = 75498472
  PriceCurrency      string{ITL}
  Issuer             string{INTESA SANPAOLO}
  Description         string{SPAOLO-CF O      6%}
  SecurityType       string{NONE}
  FOSMarketId        MOTX
  CFICode            string{DBFXXX}
  RoundLot           float64{5000000}
  MinTradeVol        float64{5000000}
  SecuritySubType     string{FX}
  InternalCreationDate Timestamp{2012-06-08 09:48:11:202}
  InternalModificationDate Timestamp{2012-06-08 12:05:03:882}
  InternalSourceId    uint16{19}
  LocalCodeStr        string{21612}
  ISIN               string{IT0000018546}
  PriceIncrement_static float64{0.001}
  MaturityYear        uint16{2013}
  MaturityMonth       uint8{10}
  MaturityDay         uint8{1}
  MARKET_LSE_NormalMarketSize float64{50000000}
  MARKET_LSE_SectorCode string{ICC}
  MARKET_LSE_SegmentCode string{DMO}

```

## 3.2. Technical Implementation of the Quotation Tags

Each time a status modification occurs, the new tags `MARKET_MILAN_MIT_TradingStatusDetails` and `MARKET_LSE_MIT_HaltReason` are being broadcast as quotation tags via QuantFEED®'s 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®'s implementation of the values currently available for the tag `MARKET_MILAN_MIT_TradingStatusDetails` is described in the following table:

**Table 3**      **Borsa Italiana MARKET\_MILAN\_MIT\_TradingStatusDetails technical implementation in QuantFEED®**

Component	Value	Description
Tag Name	MARKET_MILAN_MIT_TradingStatusDetails	QuantFEED® tag name.
Numeric ID	14950	QuantFEED® unique ID disseminated on QuantHouse®'s data stream. This is the numeric equivalent of the tag name.
Type	Char	Char data type.
Format	<i>[Exchange specific value]</i>	An <b>exchange specific value</b> , as described below, concerning the characteristics of the trading status. For more details, see section <a href="#">2. Functional Description on page 1</a> .
Possible Values	H	Halt
	T	Regular (Continuous Trading/Start of Trade Reporting)
	R	Resume Order Deletion period
	S	Trading Stop
	a	Opening Auction Call (Pre-Open)
	b	Post-Close
	c	Market Close (Closed)
	d	Closing Auction Call
	e	Re-Opening (AESP or Resume) Auction Call
	g	OPA Auction Call
	v	End of Trade Reporting
	w	No Active Session
	x	End of Post Close
	y	Pre-Trading (Start of Trading)
	z	Closing Price Publication

QuantFEED®'s implementation of the values currently available for the MARKET\_LSE\_MIT\_HaltReason is described in the following table:

**Table 4** Borsa Italiana MARKET\_LSE\_MIT\_HaltReason technical implementation in QuantFEED®

Component	Value	Description
Tag Name	MARKET_LSE_MIT_HaltReason	QuantFEED® tag name.
Numeric ID	14752	QuantFEED® unique ID disseminated on QuantHouse®'s data stream. This is the numeric equivalent of the tag name.
Type	String	String data type.
Format / Possible Values	<i>[Exchange specific value]</i> If the Trading Status is not H – Halt or S – Trading Stop, this field contains only spaces.	An <b>exchange specific value</b> concerning the trading halt reason. For more details, see section 2. <a href="#">Functional Description on page 1</a> .

QuantFEED®'s implementation of the values currently available for the tag TradingStatus is described in the following table:

**Table 5** Borsa Italiana TradingStatus technical implementation in QuantFEED®

Component	Value	Description
Tag Name	TradingStatus	QuantFEED® tag name.
Numeric ID	9100	QuantFEED® unique ID disseminated on QuantHouse®'s data stream. This is the numeric equivalent of the tag name.
Type	Enum	Char data type.
Format	<i>[Exchange specific value]</i>	An <b>exchange specific value</b> , as described below, concerning the trading status. For more details, see section 2. <a href="#">Functional Description on page 1</a> .
Possible Values	2	Halt
	3	Resume
	5	Price Indication
	17	Ready to Trade
	18	Not Available for Trading
	20	Unknown
	21	Pre-open

QuantFEED®'s implementation of the values currently available for the tag MARKET\_MILAN\_MIT\_AuctionTypeIndicator is described in the following table:

**Table 6** Borsa Italiana MARKET\_MILAN\_MIT\_AuctionTypeIndicator technical implementation

Component	Value	Description
Tag Name	MARKET_MILAN_MIT_AuctionTypeIndicator	QuantFEED® tag name.
Numeric ID	16350	QuantFEED® unique ID disseminated on QuantHouse®'s data stream. This is the numeric equivalent of the tag name.
Type	Char	Char data type.
Format	<i>[Exchange specific value]</i>	An <b>exchange specific value</b> , as described below, concerning the auction type indicator. For more details, see section 2. <a href="#">Functional Description on page 1</a> .



**Table 6** Borsa Italiana MARKET\_MILAN\_MIT\_AuctionTypeIndicator technical implementation (Continued)

Component	Value	Description
<b>Possible Values</b>	C	Closing Auction
	O	Opening Auction
	A	Re-Opening (AESP or Resume Action)
	P	OPA

## 4. Upgrading FeedOS™ API for Replay Purposes

To be able to replay the Milan Data Feed that is recorded after the migration date – **June 25, 2012** –, you should upgrade the FeedOS™ API to the minimum required version, as described in the table below:

**Table 7** Currently required version to replay Milan Data Feed

Language	FeedOS™ API – minimum required version
C++	3.6.3.3
C#	2.4.3.4

For more details about the upgrade procedure, see *FeedOS™ API Guide*.

## 5. Finding the Latest Information

For the latest documentation and product updates, additional support and training, please contact our support services:

- E-mail: [support@quanthouse.com](mailto:support@quanthouse.com)
- Web: <http://support.quanthouse.com>.