

BM&F BOVESPA

The New Exchange



PUMA Trading System

UMDF 2.0 BTB System Update

Customer Impact Document

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Contacts

- Services Development Department (**GDS**): handles all requests for connectivity setup and general exchange supported services.
 - bvmfsolution@bvmf.com.br

- Certification and Testing Center (**CTC**): performs certification of all software solutions applying for EntryPoint and UMDF connectivity.
 - ctc@bvmf.com.br

- Trading Support Department (**SSN**): provides real time connectivity monitoring and troubleshooting.
 - tradingsupport@bvmf.com.br
 - +55 11 2565-5000 (option 2)

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Revision History

Date	Version	Description	Author
04/28/2016	1.0	- Initial version	AVF
05/23/2016	1.1	- Update to inform that changes, described in this document, requires recertification by customers.	EPJ

1. Introduction

This document outlines the possible impact on client systems due to the update of the BTB System, to enable the dissemination of a new entry type and new market data fields for Security Lending contracts (to be announced later). The scope of this document is to describe the impacts on the messages carrying Security Lending information, which are transmitted on market data channel 61 UMDF 2.0, UMDFTCP, and the required update of market data templates for others UMDF 2.0 channels of Equities segment.

Please note that certification of the changes described in this document **is mandatory** and must be scheduled with the Trading Support Division by telephone at (+55 11) 2565-5000, options 4 and 1 respectively.

Another important remark is that BVMF is planning to deploy the update in two phases. First, the switch to the new market data template for all UMDF 2.0 channels, but without the new entry type or any of the new fields. Later, BVMF shall announce the date when the broadcast of the new fields and entry types should start on channel 61, and UMDTCP, for Security Lending instruments.

1.1. Dependencies

It is assumed that the reader of this document has knowledge of the basic functioning of the UMDF PUMA specification (market data). For more information regarding these protocols, please refer to the following documents:

http://www.bmfbovespa.com.br/en_us/services/trading/bm-fbovespapuma-trading-system/for-developers-and-vendors/umdf-unified-market-data-feed/

http://www.bmfbovespa.com.br/en_us/services/trading/bm-fbovespapuma-trading-system/for-developers-and-vendors/umdf-puma-conflated/

1.2. Abbreviations

Abbreviation	Description
BTB	BM&FBOVESPA Securities Lending System/Banco de Títulos BM&FBOVESPA.
BTC	BM&FBOVESPA Securities Lending System/Banco de Títulos CBLC
BVMF	Bolsa de Valores, Mercadorias & Futuros, or BM&FBOVESPA.
FAST	FIX Adapted for Streaming – a specification for data compression to reduce bandwidth usage, especially for market data feeds.
FIX	Financial Information Exchange Protocol
PTO	Public Tendering Offer
PUMA	PUMA Trading System
SSN	BM&FBOVESPA Trading Support Team / Superintendência de Suporte à Negociação.
UMDF PUMA	Unified Market Data Feed

1.3. Glossary

Term	Definition
BM&FBOVESPA	Securities, Commodities and Futures Exchange, located in São Paulo, Brazil. For more information, visit http://www.bmfbovespa.com .
Market Data	A collective term for quotes, last sales, volume statistics and other information used by the market to evaluate trading opportunities.
Security	A stock, bond or contract authorized for trading on, and by, a registered exchange. Each exchange has different criteria to determine a security's eligibility for listing.

2. Market Data

This chapter outlines the changes for the market data interface channel 61, Incremental and Snapshot of UMDFTCP for Security Lending and the update of FAST template.

2.1. FAST Template

With the BTB System update and the inclusion of new fields and domain, described below, a new template version must be used. The new version is FILE VERSION: 5.0.12, LAST UPDATED: 2015-08-30 and it is available on <ftp://ftp.bmf.com.br/FIXFAST/templates>. Table 1 below displays the changes to the FAST template.

Template	Current Version	Previous Version
MDIncrementalRefresh	150	145
MDSnapshotFullRefresh	151	147

Table 1 – Template update and version for UMDF 2.0.

2.2. Incremental Refresh message

The entry type, 269=2, Trade, will be disseminated on Channel 61, BTB, for the Security Lending contract executed on BTB System. Therefore, the new entry types available on channel 61 and UMDFTCP after the update will be:

MDEntry	Description
269=0,1	BTB Book Entries (Borrower, Lending)
269=2	BTB Contract (Trade)
269=J	BTB Book Reset
269=B	BTB Trade Volume
269=C	BTB Open Interest

Table 2 – List of entry types support for BTB, Security Lending, after update.

2.3. New Fields and Domain

Although this new fields will only be disseminated on channel 61, *MDStreamID=L* of UMDF 2.0, the FAST template for the additional UMDF2.0 channel will also contemplate them. This change also affects the UMDFTCP for Security Lending instruments.

2.3.1. New fields on Trade entry type (269=2).

Field Id	Field Name	Change	Description
37024	BTBContractInfo	New field	Denotes extra information about the BTB pre-contract. Valid values: 1 = pre-contract (default) 2 = intention
37025	BTBGraceDate	New field	Indicates the minimum date from when the borrower can call the loan contract to an end
37019	EarlyTermination	Additional domain	Indicates if the deal is subject to anticipated liquidation (early termination of the borrowing/lending) .Used in BTB contracts only. Valid values: 0 = Normal termination (default) 1 = Early termination 2 = Early termination also in case of PTO

Table 3 – New fields and domain for Trade entry type, 269=2.

Below is a sample of a message containing the new tag and domain (as decoded directly from the FAST message):

35	MsgType	X (MARKET_DATA_INCREMENTAL_REFRESH)
34	MsgSeqNum	0
52	SendingTime	20160418142356851 (2016-04-18 14:23:56.851)
75	TradeDate	20160418 (2016-04-18)
268	NoMDEntries	1
279	MDEntryAction	0 (NEW)
269	MDEntryType	2 (TRADE)
48	SecurityID	120000003
22	SecurityIDSource	8 (EXCHANGE_SYMBOL)
207	SecurityExchange	BVMF
270	MDEntryPx	0.1
271	MDEntrySize	100
272	MDEntryDate	20160418 (2016-04-18)
273	MDEntryTime	112347000
1003	TradeID	20044198
288	MDEntryBuyer	1510
289	MDEntrySeller	1512
1020	TradeVolume	100
83	RptSeq	0
37016	MDInsertDate	20160418
432	ExpireDate	20160429
1500	MDStreamID	L
37014	MDEntryInterestRate	0.075
37017	MDInsertTime	112347000
> 37019	EarlyTermination	2 (Early termination also in case of PTO)
> 37024	BTBContractInfo	1 (Pre-Contract)
> 37025	BTBGraceDate	20160419

2.3.2. New fields on Bid/Offer entry type (269=0/1).

Field Id	Field Name	Change	Description
37023	BTBCertIndicator	New field	Indicates if the security lending offer or pre contract is certified.If not sent, means the offer or pre-contract is not certified. Valid values: 0 = Certified 1 = Not certified
37019	EarlyTermination	Additional domain	Same domain as for 269=2

Table 4 – New fields and domain for entry types, 269=0 and 1.

Below is a sample of a message containing the new tag and domain (as decoded directly from the FAST message):

35	MsgType	X (MARKET_DATA_INCREMENTAL_REFRESH)
34	MsgSeqNum	0
52	SendingTime	20160418140221074 (2016-04-18 14:02:21.074)
75	TradeDate	20160418 (2016-04-18)
268	NoMDEntries	1
279	MUpdateAction	0 (NEW)
269	MEntryType	0 (BID)
48	SecurityID	120000003
22	SecurityIDSource	8 (EXCHANGE_SYMBOL)
207	SecurityExchange	BVMF
270	MEntryPx	0.1
271	MEntrySize	100
272	MEntryDate	20160418 (2016-04-18)
273	MEntryTime	00000000
37	OrderID	200050984
290	MEntryPositionNo	7
83	RptSeq	0
37016	MDInsertDate	20160418
432	ExpireDate	20160429
1500	MStreamID	L
37017	MDInsertTime	00000000
> 37019	EarlyTermination	2 (Early termination also in case of PTO)
> 37023	BTBCertIndicator	1 (Not Certified)
> 37025	BTBGraceDate	20160419

3. Key dates

The actual upgrade is expected to occur on Q3/2016, with certification and production dates for the migration template update and dissemination of the new entry type and tags to be made available on Circular Letters and the BM&FBOVESPA IT Newsletter.