

MEXICAN EXCHANGE CONNECTOR



MEXICAN EXCHANGE CONNECTOR



General Description

Mexican Exchange Connector (MEC) is a software product specially design to connect Order Management Systems (OMS) with the Mexican Stock Exchanges: both BIVA and BMV. It supports all the protocols established by the exchanges covering market data and order routing as well. MEC was conceived and designed from its origins, to support in real time, the high volume of messages common to the current modern markets.



Funcionalidad

- Supports the following protocols: Setrib, FIX, Multicast BMV and Itch.
- High volume message processing in real time.
- Monitoring and management GUI
- Support multiple connections.
- An Exchange simulator is provided as a separate tool. It's goal is to provide a helpful tool to test different scenarios and use cases without the need of the Exchange testing environment.
- Log messages.
- Parallel processing through multiple configurable queues.



Technical aspects

- 100% Java application.
- Supports multiple platforms, it can run on: Linux, Windows, Unix, Solaris, etc.
- Real-time management through the use of the JMX standard.
- Supports high volumes of messages.
- Optimized for it use with LOR (Lumina Order Routing).

GUI

Monitoring and management GUI

Mec Console
 Lumina MEC Console, powered by Lumina Americas

General
 Connected **lor** Startup Time **21/09/2009 07:58:01**
 Admin Port **8000** Logger Level **info**

Components

Name	Logger Level	Total Routed	RPM	APT	Listeners	Start On Init	State
GEO-B-TxPersistentBuffer	info	0	0.0	0.0		Yes	■
GFAMSA-A-TxPersistentBuffer	info	0	0.0	0.0		Yes	■
GFNORTE-O-TxPersistentBuffer	info	0	0.0	0.0		Yes	■
GMEXICO-B-TxPersistentBuffer	info	0	0.0	0.0		Yes	■
LorConnector	info	0	0.0	66.39		--	
MDPersistentBuffer	info	82	0.0030	0.378		Yes	■
MecDBPool	info	0	0.0	--		--	
MecDispatcher	info	575	0.024	0.0		--	
MecParser	info	82	0.0030	0.195		--	
NAFRAC-02-TxPersistentBuffer	info	0	0.0	0.0		Yes	■
PSODBInserter	info	0	0.0	11.037		--	
PSOParser	info	493	0.02	0.063		--	
PSOPersistentBuffer	info	493	0.02	0.316		Yes	■
SetribChk-SumVal	info	575	0.024	0.273		--	
SetribMsgFilter	info	575	0.024	0.026		--	
SetribPlusChk-SumVal	info	0	0.0	0.0		--	
SetribPlusMsgFilter	info	0	0.0	0.0		--	
SetribPlusTCP	info	0	0.0	0.0		Yes	■
SetribTCP	info	575	0.024	0.0		Yes	■
TELMEX-L-TxPersistentBuffer	info	0	0.0	0.0		Yes	■
TLEVISA-CPO-TxPersistentBuffer	info	0	0.0	0.0		Yes	■
TxDispatcher	info	0	0.0	0.0		--	
TxFileLogger	info	0	0.0	0.0		--	
TxQueueConsumer	info	0	0.0	-- TxDispatcher		Yes	■
TxSequencer	info	0	0.0	0.0		--	
WALMEX-V-TxPersistentBuffer	info	0	0.0	0.0		Yes	■

Processing Queues

Mec Console
Lumina MEC Console, powered by Lumina Americas

General
Connected **lor** Startup Time **21/09/2009 07:58:01**
Admin Port **8000** Logger Level **info** Change Shutdown

Components

Name	Logger Level	Total Routed	RPM	Total Proce...	TPM	APT	Start On Init	State
AMX-L-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
CEMEX-CPO-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
COMPART-O-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
Default-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
GEO-B-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
GFAMSA-A-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
GFNORTE-O-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
GMEXICO-B-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
MDPersistentBuffer	info	82	0.0030	82	0.0030	0.378	Yes	■
NAFTRAC-02-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
PSOPersistentBuffer	info	493	0.02	493	0.02	0.316	Yes	■
TELMEX-L-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
TLEVISA-CPO-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■
WALMEX-V-TxPersistentBuffer	info	0	0.0	0	0.0	0.0	Yes	■

Change Logger Reset Stats Reprocess Stop Start

Mec Console
Lumina MEC Console, powered by Lumina Americas

General
Connected **lor** Startup Time **21/09/2009 07:58:01**
Admin Port **8000** Logger Level **info** Change Shutdown

Components

Component Detail

Name **AMX-L-TxPersistentBuffer** Total Routed **0** Routed Per Minute **0.0** Change Logger
Logger Level **info** Listeners Reset Stats

Routes Detail

Total Processed **0** Processed Per Minute **0.0** Average Process Time **0.0**

Service Detail

State **started** Startup Order **Yes** Start Stop

Persistent Buffer

Queue Size **-6** Actual Read Date **2009-09-17** Actual Write Date **--** Reprocess

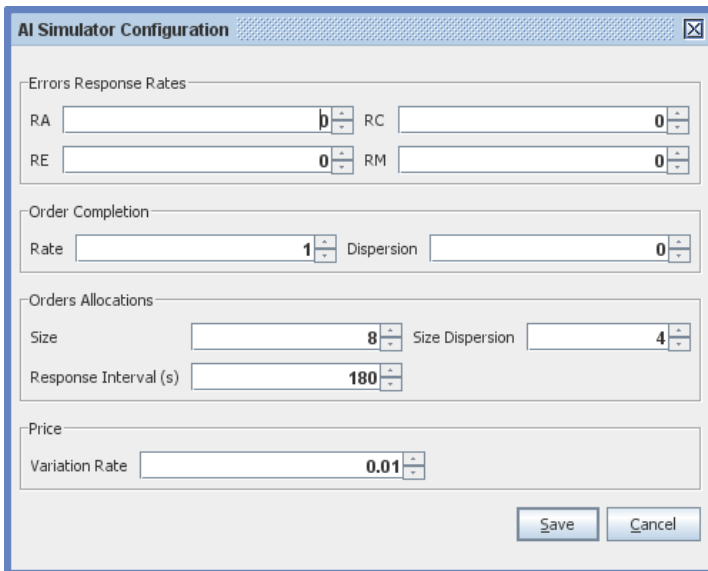
SIMULATOR SCREENS

Market Data

The screenshot displays the BMV Simulator interface. It includes a 'General' section with Host 'lor', Setrib Port '5445', and Setrib Plus Port '5444'. Below are two channels: 'Market Data Channel' and 'Transactions Channel'. Both channels show a list of messages with columns for Time, Type, and Message. A 'Message Editor' window is open over the Transactions Channel, showing a table of fields and their values for a specific message.

Field	Value
PK	1
REGISTRY_TYPE	P1
SENDERID	MEC
SERVICEID	P1
TABLENAME	X
amount	37275
auctionSaleIndicator	
buyOrSell	
commission	0
coordinationType	CO
couponNumber	0
dueDays	0
executionDateTime	1808
executionSheetNumber	7548
filler	
hdr_content	082065
hdr_content_type	02
hdr_date	20091008
hdr_hour	180617
hdr_sequence	21

Configuration of the automatic responses: probability of execution and price sigma.

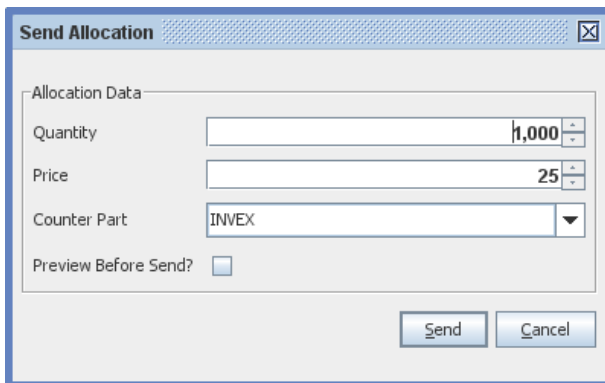


The dialog box is titled "AI Simulator Configuration" and contains several sections of controls:

- Errors Response Rates:** Four spinners for RA (value: 0), RC (value: 0), RE (value: 0), and RM (value: 0).
- Order Completion:** Two spinners for Rate (value: 1) and Dispersion (value: 0).
- Orders Allocations:** Three spinners for Size (value: 8), Size Dispersion (value: 4), and Response Interval (s) (value: 180).
- Price:** One spinner for Variation Rate (value: 0.01).

Buttons for "Save" and "Cancel" are located at the bottom right.

Manual Execution Creation



The dialog box is titled "Send Allocation" and contains the following controls:

- Allocation Data:** A section containing:
 - Quantity spinner (value: 1,000)
 - Price spinner (value: 25)
 - Counter Part dropdown menu (selected: INVEX)
 - Preview Before Send? checkbox (unchecked)

Buttons for "Send" and "Cancel" are located at the bottom right.

Transactional channel view

BMV Simulator
Exit

Lumina BMV Simulator, powered by Lumina Americas

General

Host: **lor** Setrib Port: **5445** Setrib Plus Port: **5444**

Market Data Channel Transactions Channel

AI Bot Configuration

State: **Running** Conf AI Bot Rules Start Stop

Incoming Messages

Time	Type	State	Message
18:06:17	RA	Accepted	0000021180617020000082065146RASCTIAMCRO3lor_sen0004320 2009100818061735ORDCPNCLPCO1 BACHOCOUBL 0000000005700000025000000 2009
18:06:17	RA	Accepted	0000020180617020000082065146RASCTIAMCRO3lor_sen0004310 2009100818061787ORDCPNCLPCO1 BACHOCOUBL 0000000005700000025000000 2009
18:06:16	RA	Accepted	0000019180616020000082065146RASCTIAMCRO3lor_sen0004300 2009100818061665ORDCPNCLPCO1 BACHOCOUBL 0000000005700000025000000 2009
18:06:15	RA	Accepted	0000018180615020000082065146RASCTIAMCRO3lor_sen0004290 2009100818061590ORDCPNCLPCO1 BACHOCOUBL 0000000005700000025000000 2009
18:06:15	RA	Accepted	0000017180615020000082065146RASCTIAMCRO3lor_sen0004280 2009100818061527ORDCPNCLPCO1 BACHOCOUBL 0000000005700000025000000 2009
18:06:14	RA	Accepted	0000016180614020000082065146RASCTIAMCRO3lor_sen0004270 2009100818061486ORDCPNCLPCO1 BACHOCOUBL 0000000005700000025000000 2009
18:05:55	RA	Accepted	0000015180555020000082065146RASCTIAMCRO3lor_sen0004260 2009100818055546ORDCPNCLPCO1 BACHOCOUBL 0000000005700000025000000 2009
18:05:11	RA	Accepted	0000014180511020000082065146RASCTIAMCRO3lor_sen0004250 2009100818051117ORDCPNCLPCO1 VITRO A 0000000002000000025000000 2009100
18:05:08	RA	Accepted	0000013180508020000082065146RASCTIAMCRO3lor_sen0004240 2009100818050867ORDCPNCLPCO1 VITRO A 0000000002000000025000000 2009100
18:05:07	RA	Accepted	0000012180507020000082065146RASCTIAMCRO3lor_sen0004230 2009100818050714ORDCPNCLPCO1 VITRO A 0000000002000000025000000 2009100
18:05:04	RA	Accepted	0000011180504020000082065146RASCTIAMCRO3lor_sen0004220 2009100818050433ORDCPNCLPCO1 VITRO A 0000000002000000025000000 2009100

Preview Message Accept Reject

Active Orders

Order Id	Sub Order	Security	Price	Original Qty	Allocated Qty
000432	0	1 BACHOCO UBL	25.0	5700.0	0.0
000431	0	1 BACHOCO UBL	25.0	5700.0	500.0
000430	0	1 BACHOCO UBL	25.0	5700.0	500.0
000429	0	1 BACHOCO UBL	25.0	5700.0	0.0
000428	0	1 BACHOCO UBL	25.0	5700.0	0.0
000427	0	1 BACHOCO UBL	25.0	5700.0	0.0
000426	0	1 BACHOCO UBL	25.0	5700.0	1000.0
000425	0	1 VITRO A	25.0	2000.0	100.0
000424	0	1 VITRO A	25.0	2000.0	1500.0
000423	0	1 VITRO A	25.0	2000.0	400.0
000422	0	1 VITRO A	25.0	2000.0	1000.0
000421	0	1 VITRO A	25.0	2000.0	1300.0

Send Allocation Close Order

▶ OUR COMPANY

Lumina Americas is a regional consulting and technology service company based in Latin America with offices in Argentina, Mexico and a representation in Spain.

With more than 14 years of experience developing solutions for the Financial Services Industry in Latin America, we develop mission critical software solutions to help our clients build and support their high-performance businesses.

Lumina was formed as a spin-off of regional application development team of JPMorgan Chase Bank (April 2001)

More than 100 professionals with extensive technical and financial experience

Strong team-work and collaboration culture with more than 10 years working together

Owned and existing solutions for serving the financial market

Software Components and Frameworks

Advance CMM practices

Combination of resources for the whole life-cycle of software projects

Top 40 Argentinean Companies in quality of labor environment

“Proven experience developing, implementing and supporting mission critical financial systems”



OFICINAS

Buenos Aires:

Av. Pueyrredón 2446, 7º piso

C1119ACU - Buenos Aires, Argentina

Tel.: +54 (11) 4131-8500

Fax: +54 (11) 4131-8539

México:

Sierra Candela 111, of 412 (11000)

Col Lomas de Chapultepec, CDMX.

Tel: +52 (55) 5985-0559/7453

e-mail: info@luminaamericas.com

Representación Comercial en España

Tel.: +34 618191694

e-mail: info@luminaamericas.com

Visit our website: <http://www.luminaamericas.com>

CLIENTES

- JPMorgan Chase
- Credit Suisse
- HSBC
- UBS
- Deutsche Bank
- Banco Voii
- Intercam Casa de Bolsa
- Barclays
- Actinver
- Grupo Financiero Intercam
- Grupo Financiero Ixe-Banorte
- BTG Pactual
- Akaan Casa de Bolsa
- Grupo Financiero Multiva
- Grupo Financiero BanRegio
- Altor Casa de Bolsa
- Kuspit Casa de Bolsa
- Banco Base
- BHD León
- Bursamérica
- Sura