

# **EntryPoint Order Routing**

## **Certification Script**

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#### **Revision History**

Date	Version	Description	Author
July 17, 2023	5.4	- Added "H2. Limit on Close"	Trading Certification
October 3, 2022	5.3	- Added "X. Mass Cancel"	Trading Certification
August 19, 2022	5.2	- Added "Midpoint Offers"	Trading Certification
March 08, 2022	5.1	- Added "EDS - Exchange Defined Strategies"	Trading Certification
December 13, 2021	5.0	- Updating the scenarios "M1. LINE5.0 and M2. LINE5.0"	Trading Certification
August 02, 2021	4.9	- Added "OMC – Order Cancel During an Auction" scenario	Trading Certification
July 06, 2021	4.8	- Updating the scenario "I – Self Trade Prevention" - Added "L2 – Automatic Exercise of Options on Equities, Units and ETFs" scenario	Trading Certification
May 19, 2020	4.7	- Added "SLC – Session Level Cancel" scenario	Trading Certification
December 18, 2019	4.6	- Updating obsolete scenarios and reviewing scenarios with wrong descriptions.	Trading Certification
February 20, 2019	4.5	- Added "RLP" scenario	Trading Certification
April 07, 2015	4.4	- Market Maker Protection updated	DC CTC
December 12, 2013	4.3	<ul> <li>"Stop With Protection" scenarios updated</li> <li>"Frozen Instrument" scenario removed</li> <li>"Cross orders" scenario now available for DMA on Equities segment</li> </ul>	AMS/CTC
March 4, 2013	4.2	- Automation of Certification script on MyCTC	СТС
November 21, 2012	4.1	- Corrected Scenario "Self Trade Prevention" - Corrected Requirement of scenario "Account Modification" - Corrected scenario "Market on Auction" - Corrected scenario "Trade on Behalf"	JMCGA/CTC
September 15, 2012	4.0	- Added New Release scenario: C;E and Q	JMCGA/CTC
August 27, 2012	3.5	<ul> <li>Correction in scenario "Limit Orders with validity</li> <li>Day"</li> <li>Correction in scenario "Order entry with frozen instrument"</li> </ul>	DCG/CTC
August 23, 2012	3.4	<ul> <li>- Line scenario modified</li> <li>- Forward scenario modified</li> <li>- E&amp;B scenario modified</li> <li>- Self-Trade Prevention scenario modified</li> <li>- GTSClient Drop Copy scenario removal</li> <li>"Order entry with reserved instrument" scenario modified</li> <li>- Market on Auction scenario modified</li> </ul>	DCG/CTC

May 25, 2012	3.3	<ul> <li>Corrected the self-trade prevention scenario</li> <li>Removed session message scenario</li> <li>Included scenarios C6 for equities</li> <li>Scenario A5.3 is no longer mandatory</li> <li>Trade give up corrected</li> </ul>	JMCGA/CTC
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May 09, 2012	3.2	- Notes for still unavailable scenarios included  - Scenario 2.8 moved to 1.8 once it is now mandatory  - Corrected, in the EntryPoint line scenario the quantity and price to be accepted in Mega EntryPoint and EntryPoint Derivatives, also added the rejection information  - Added the session messages tests  - Corrected Self Trade Prevention scenario.  - Corrected Cancel On Disconnect scenario.	JMCGA/CTC
January 11, 2012	3.1	- Initial version	AMS/CTC



#### 1. Preface

This document describes the series of tests that qualify a third-party institution to connect to B3 for the purpose of routing orders for Derivatives and Equities segments using FIX4.4 (Financial Information exchange).

FIX is a technical specification for an electronic communication of trade-related messages. It is an open standard managed by members of FIX Protocol Limited. (<a href="https://www.fixprotocol.org">www.fixprotocol.org</a>)

This document outlines the certification process to route orders through B3 EntryPoint and is provided for third-parties which need trading connectivity with B3.

To request copies of this document, please contact: tradingcertification@b3.com.br



#### 2. Introduction

The test scenarios will be executed sequentially, and each one will be available for 15 minutes, this way, the expected results can be verified and initially analyzed in case of failure.

All FIX messages should follow the specification in "EntryPoint: Order Entry Messaging – Message Specification" and "EntryPoint: Order Entry Messaging - Messaging Guidelines" which are available on the B3 website at: <a href="http://www.b3.com.br/en\_us/solutions/platforms/puma-trading-system/for-developers-and-vendors/entrypoint-order-entry/">http://www.b3.com.br/en\_us/solutions/platforms/puma-trading-system/for-developers-and-vendors/entrypoint-order-entry/</a>



3. Glossary	
GTD	Good Till Date
GTC	Good Till Cancel
IOC	Immediate Or Cancel
FAK	Fill And Kill
FOK	Fill Or Kill
ATC	At The Close
GFA	Good For Auction
HFT	High Frequence Trader
RLP	Retail Liquidity Provider
RLT	Retail Liquidity Taker



#### A1. LIMIT Orders with Validity DAY

Tags: 35=D; 40=2; 59=0

Access model: DMA and Desk trader								
Step	Description	Expected result	Req	Stat	us			
A1.1	Customer: Send buy limit order, DAY  • 100@20,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00	Order filled - Trade	Y	Pass	N/E			
A1.2	Customer: Send buy limit order, DAY  • 200@20,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00	Order partial filled - Trade Orders on book: • Buy 100@20,00	Y	Pass	N/E			
A1.3	Customer: Modifies pending buy order     From: 100@20,00     Modify to: 300@21,00	Modification of the pending offer  Orders on book:  • Buy 200@21,00	Y	Pass	N/E			
A1.4	TRADING CERTIFICATION: Send sell limit order, DAY  • 100@21,00	Modified order partial filled - Trade  Orders on book:  • Buy 100@21,00	Y	Pass	N/E			
A1.5	Customer: Cancels pending order • 100@21,00	Cancel pending order.	Y	Pass	N/E			
A1.6	TRADING CERTIFICATION: Send buy limit order, DAY  • 200@20,00  Customer: Send sell limit order, DAY  • 100@21,00	Orders on book:	Y	Pass	N/E			
A1.7	Customer: Modifies pending sell order     From: 100@21,00     Modify to: 300@20,00	Modified order partial filled - Trade  Orders on book:  Sell 100@20,00	Y	Pass	N/E			
A1.8	Customer: Logout connection with the Exchange	Receive logout message 35=5.	Y	Pass	N/E			
A1.9	TRADING CERTIFICATION: Cancels sell limit order, DAY	Cancel pending order	Y	Pass	N/E			
A1.10	Customer: Send the logon message with 141=N (don't restart the sequence number) Customer: send resend request message	The orders that have not been sent, shall not be submitted to the Exchange. Execution Report messages are resent.	Y	Pass	N/E			
A1.11	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	Υ	Pass	N/E			



#### A2. LIMIT Orders with Validity GTC

Tags: 35=D; 40=2; 59=1
Available for: PUMA Equities;, EntryPoint Access model: DMA and Desk trader

Step	Description	Expected result	Req	Sta	tus				
A2.1	Customer: Send buy limit order, GTC  • 100@20,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00	Order total filled. Trade.	N	Pass	N/E				
A2.2	Customer: Send buy limit order, GTC  • 200@20,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00	Order partial filled. Trade.  Orders on book:  • Buy 100@20,00	N	Pass	N/E				
A2.3	Customer: Modifies pending buy order From: 100@20,00 Modify to: 300@21,00	Pending orders on book modification  Orders on book:  • Buy 200@21,00	N	Pass	N/E				
A2.4	TRADING CERTIFICATION: Send sell limit order, DAY  • 100@21,00	Modified order partial filled Trade.  Orders on book:  • Buy 100@21,00	N	Pass	N/E				
A2.5	Customer: Cancels pending order • 100@21,00	Cancel pending order.	N	Pass	N/E				
A2.6	TRADING CERTIFICATION: Send buy limit order, DAY  • 200@20,00  Customer: Send sell limit order, GTC  • 100@21,00	Orders on book:	N	Pass	N/E				
A2.7	Customer: Modifies pending sell order  From: 100@21,00  Modify to: 300@20,00	Modified order partial filled: Trade.  Orders on book:  Sell 100@20,00	N	Pass	N/E				
A2.8	TRADING CERTIFICATION: Cancels sell limit order, GTC	Cancel pending order.	N	Pass	N/E				
A2.9	TRADING CERTIFICATION: Cancel trade(s).	Trades cancelled.	N	Pass	N/E				



#### A3. LIMIT Orders with Validity IOC/FAK

Tags: 35=D; 40=2; 59=3

Step	Description	Expected Result	Req	Stat	tus
A3.1	Customer: Send buy limit order, IOC/FAK  • 100@20,00	Immediate order cancel	Y	Pass	N/E
A3.2	TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00  Customer: Send buy limit order, IOC/FAK  • 200@20,00	Order partial filled.  • Trade.  Cancel pending Quantity:  • Buy 100@20,00	Y	Pass	N/E
A3.3	Customer: Send buy limit order, DAY  • 100@20,00  Customer: Modifies buy order to validity IOC/FAK	Order modification execution:  • Order cancelled.	N	Pass	N/E
A3.4	TRADING CERTIFICATION: Send buy limit order, DAY  • 200@20,00  Customer: Send sell limit order, IOC/FAK  • 100@20,00	Order total filled.  • Trade.  Pending Quantity:  • Buy 100@20,00	Y	Pass	N/E
A3.5	Customer: Send sell limit order, IOC/FAK  • 100@20,00	Order total filled.  • Trade.	Y	Pass	N/E
A3.6	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	Y	Pass	N/E



#### A4. LIMIT Orders with Validity GTD

Tags: 35=D; 40=2; 59=6
Available for: PUMA Equities, EntryPoint Access model: DMA and Desk trader

Step	Description	Expected Result	Req	Stat	us				
A4.1	Customer: Send buy limit order, GTD  • 100@20,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00	Order total filled. Trade.	N	Pass	N/E				
A4.2	Customer: Send buy limit order, GTD  • 200@20,00  TRADING CERTIFICATION: Send sell limit order, GTD  • 100@20,00	Order partial filled. Trade.  Orders on book:  Buy 100@20,00	N	Pass	N/E				
A4.3	Customer: Modifies pending buy order     From: 100@20,00     Modify to: 300@21,00	Pending orders on book modification  Orders on book:  • Buy 200@21,00	N	Pass	N/E				
A4.4	TRADING CERTIFICATION: Send sell limit order, GTD  • 100@21,00	Modified order partial filled: Trade.  Orders on book:  • Buy 100@21,00	N	Pass	N/E				
A4.5	Customer: Cancels pending order • 100@21,00	Cancel pending order.	N	Pass	N/E				
A4.6	TRADING CERTIFICATION: Send buy limit order, GTD  • 200@20,00  Customer: Send sell limit order, GTD  • 100@21,00	Orders on book:  • Buy 200@20,00  • Sell 100@21,00	N	Pass	N/E				
A4.7	Customer: Modifies pending sell order  From: 100@21,00  Modify to: 300@20,00	Modified order partial filled: Trade.  Orders on book:  • Sell 100@20,00	N	Pass	N/E				
A4.8	Customer: Send buy limit order, GTD with earlier date  • 100@20,00	Order rejection.	N	Pass	N/E				
A4.9	TRADING CERTIFICATION: Cancels sell limit order	Cancel pending order.	N	Pass	N/E				
A4.10	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	N	Pass	N/E				



#### A5. LIMIT Orders with Validity FOK

Tags: 35=D; 40=2; 59=4
Available for: PUMA Equities; PUMA Derivatives, EntryPoint Access model: DMA and desk trader

Step	Description	Expected Result	Req	Stat	us
A5.1	Customer: Send buy limit order, FOK  • 100@20,00	Immediate order cancel	N	Pass	N/E
A5.2	TRADING CERTIFICATION: Send buy limit order, DAY  • 200@20,00  Customer: Send sell limit order, FOK  • 200@20,00	Order total filled.  Trade.	N	Pass	N/E
A5.3	TRADING CERTIFICATION: Send buy limit order, DAY  • 200@20,00  Customer: Send sell limit order, FOK  • 400@20,00	Immediate order cancel	N	Pass	N/E
A5.4	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	Z	Pass	N/E



#### **B1. MARKET TO LIMIT Orders with Validity DAY**

Tags: 35=D; 40=K; 59=0
Available for: PUMA Equities; PUMA Derivatives, EntryPoint Access model: DMA and Desk trader

Step	Description	Expected Result	Req	Stat	us			
B1.1	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send Market to Limit sell order, DAY  • 100@Market to Limit	Order total filled. Trade.	N	Pass	N/E			
B1.2	TRADING CERTIFICATION: Send buy limit order, DAY  • 200@20,00  Customer: Send Market to Limit sell order, DAY  • 100@Market to Limit	Order total filled. Trade.  Orders on book:  • Buy 100@20,00	N	Pass	N/E			
B1.3	Customer: Send Market to Limit sell order, DAY  • 200@Market to Limit	Order partial filled. Trade  Orders on book:  • Sell 100@20,00	Z	Pass	N/E			
B1.4	Customer: Cancels pending order • 100@20,00	Cancel pending order.	Ν	Pass	N/E			
B1.5	TRADING CERTIFICATION: Send buy limit order, DAY • 200@20,00  Customer: Send sell limit order, DAY • 100@21,00	Orders on book:	Z	Pass	N/E			
B1.6	Customer: Modifies sell limit order, DAY  From: 100@21,00  Modify to: 200@Market to Limit	Modified order total filled: Trade.	Ν	Pass	N/E			
B1.7	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  • 100@21,00  Customer: Send Market to Limit sell order, DAY  • 200@Market to Limit	Order partial filled. Trade.  Orders on book:  Buy 100@20,00 Sell 100@21,00	N	Pass	N/E			
B1.8	TRADING CERTIFICATION: Cancels buy and sell limit orders, DAY. including Customer's order	Pending order(s) cancel	N	Pass	N/E			
B1.9	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	Ν	Pass	N/E			



#### **B2. MARKET TO LIMIT Orders with Validity GTC**

Tags: 35=D; 40=K; 59=1
Available for: PUMA Equities; PUMA Derivatives, EntryPoint Access model: DMA and Desk trader

	Access model. DiviA and Desk tradel							
Step	Description	Expected Result	Req	Req Status				
B2.1	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send Market to Limit sell order, GTC  • 100@Market to Limit	Order total filled. Trade.	N	Pass	N/E			
B2.2	TRADING CERTIFICATION: Send buy limit order, DAY • 200@20,00  Customer: Send Market to Limit sell order, GTC • 100@Market to Limit	Order total filled. Trade.  Orders on book:  Buy 100@20,00	N	Pass	N/E			
B2.3	Customer: Send Market to Limit sell order, GTC • 200@Market to Limit	Order partial filled. Trade  Orders on book:  • Sell 100@20,00	N	Pass	N/E			
B2.4	Customer: Cancels pending order • 100@20,00	Cancel pending order.	N	Pass	N/E			
B2.5	TRADING CERTIFICATION: Send buy limit order, DAY • 200@20,00  Customer: Send sell limit order, GTC • 100@21,00	Orders on book:  • Buy 200@20,00  • Sell 100@21,00	N	Pass	N/E			
B2.6	Customer: Modifies sell limit order, GTC	Modified order total filled: Trade.	N	Pass	N/E			
B2.7	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  • 100@21,00  Customer: Send Market to Limit sell order, GTC  • 200@Market to Limit	Order partial filled. Trade.  Orders on book:  Buy 100@20,00 Sell 100@21,00	N	Pass	N/E			
B2.8	TRADING CERTIFICATION: Cancels buy and sell limit orders, GTC. including Customer's order	Pending order(s) cancel.	N	Pass	N/E			
B2.9	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	N	Pass	N/E			



#### **B3. MARKET TO LIMIT Orders with Validity IOC/FAK**

Tags: 35=D; 40=K; 59=3

Step	Description	Expected Result	Req	Stat	us
B3.1	TRADING CERTIFICATION: Send buy limit order, DAY • 100@20,00  Customer: Send Market to Limit sell order, IOC/FAK • 100@Market to Limit	Order total filled. Trade.	N	Pass	N/E
B3.2	TRADING CERTIFICATION: Send buy limit order, DAY • 100@20,00  Customer: Send Market to Limit sell order, IOC/FAK • 200@Market to Limit	Order partial filled.  • Trade.  Pending order cancellation	N	Pass	N/E
B3.3	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send sell limit order, DAY  • 100@21,00  Customer: Modifies sell order to validity Market to Limit, IOC/FAK	Order modification execution Order total filled - Trade	N	Pass	N/E
B3.4	TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00  Customer: Send Market to Limit buy order, IOC/FAK  • 300@Market to Limit	Order partial filled.  • Trade.  Order (quantity 200) cancelled.	N	Pass	N/E
B3.5	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	N	Pass	N/E



#### **B4. MARKET TO LIMIT Orders with Validity GTD**

Tags: 35=D; 40=K; 59=6

	Access mode	I: DMA and Desk trader			
Step	Description	Expected Result	Req	Stat	tus
B4.1	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send Market to Limit sell order, GTD  • 100@Market to Limit	Order total filled  Trade	N	Pass	N/E
B4.2	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send Market to Limit sell order, GTD  • 200@Market to Limit	Order total filled  Trade  Orders on book:  • Sell 100@20,00	N	Pass	N/E
B4.3	Customer: Modifies pending sell order     From: 100@20,00     Modify to: 300@Market to Limit	Modification Rejected, once there is no Counterparty	N	Pass	N/E
B4.4	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@21,00	Order total filled  Trade	N	Pass	N/E
B4.5	Customer: Send Market to Limit sell order, GTD  • 100@Market to Limit	Order Rejected once there is no Counterparty	N	Pass	N/E
B4.6	TRADING CERTIFICATION: Send buy limit order, GTD  • 100@20,00  Customer: Send Market to Limit sell order, GTD  • 200@Market to Limit	Partial filled  Orders on book:  • Sell 100@20,00	N	Pass	N/E
B4.7	TRADING CERTIFICATION: Cancel pending sell order	Cancel pending order.	N	Pass	N/E
B4.8	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	N	Pass	N/E



#### **B5. MARKET TO LIMIT Orders with Validity FOK**

Tags: 35=D; 40=K; 59=4

Step	Description	Expected Result	Req	Stat	us
B5.1	Customer: Send Market to Limit sell order, FOK  • 200@Market to Limit	Order Rejected	N	Pass	N/E
B5.2	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send Market to Limit sell order, FOK  • 100@Market to Limit	Order total filled. Trade.	N	Pass	N/E
B5.3	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send Market to Limit sell order, FOK  • 200@Market to Limit	Order is accepted then canceled	Z	Pass	N/E
B5.4	TRADING CERTIFICATION: cancel trades	Trades cancelled	N	Pass	N/E



#### C1. STOP LIMIT Orders with Validity DAY

Tags: 35=D; 40=4; 59=0

Available for: PUMA Equities; PUMA Derivatives, EntryPoint

	Access mode	el: DMA and Desk trader			
Step	Description	Expected result	Req	Stat	tus
C1.1	Customer: Send Stop Limit buy order, DAY  • 100@22,10 • Stop price: 22,00  TRADING CERTIFICATION: Send buy limit order, DAY • 100@22,00  TRADING CERTIFICATION: Send sell limit order, DAY • 100@22,00  TRADING CERTIFICATION: Trade at price 22,00  TRADING CERTIFICATION: Send sell limit order, DAY • 100@22,00  TRADING CERTIFICATION: Trade at price 22,10	Order triggered a totally filled	N	Pass	N/E
C1.2	Customer: Send Stop Limit buy order, DAY  • 200@22,30 • Stop price: 22,20  TRADING CERTIFICATION: Send buy limit order, DAY • 100@22,20  TRADING CERTIFICATION: Send sell limit order, DAY • 100@22,20  TRADING CERTIFICATION: Trade at price 22,20  TRADING CERTIFICATION: Send sell limit order, DAY • 100@22,20  TRADING CERTIFICATION: Trade at price 22,30  TRADING CERTIFICATION: Trade at price 22,30	Order triggered and partiallly filled Orders on book:  • Buy 100@22,30	N	Pass	N/E
C1.3	Customer: Cancels pending order • 100@22,30	Cancel pending order.	N	Pass	N/E
C1.4	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	N	Pass	N/E



#### C2. STOP LIMIT Orders with Validity GTC

Tags: 35=D; 40=4; 59=1

Available for: PUMA Equities; PUMA Derivatives, EntryPoint

Access model: DMA and Desk trader

	Access model: DMA and Desk trader							
Step	Description	Expected result	Req	Stat	tus			
C2.1	Customer: Send Stop Limit buy order, GTC  • 100@23,10  • Stop price: 23,00  TRADING CERTIFICATION: Send buy limit order, DAY  • 100@23,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@23,00  TRADING CERTIFICATION: Trade at price 23,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@23,00  TRADING CERTIFICATION: Trade at price 23,10	Order triggered and totally filled	Z	Pass	N/E			
C2.2	Customer: Send Stop Limit buy order, GTC  • 200@23,30  • Stop price: 23,20  TRADING CERTIFICATION: Send buy limit order, DAY  • 100@23,20  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@23,20  TRADING CERTIFICATION: Trade at price 23,20  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@23,20  TRADING CERTIFICATION: Trade at price 23,30	Order triggered and partially filled Orders on book:  • Buy 100 – 23,30	Z	Pass	N/E			
C2.3	Customer: Cancels pending order • 100@23,30	Cancel pending order.	N	Pass	N/E			
C2.4	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	N	Pass	N/E			



#### C3. STOP LIMIT Orders with Validity GTD

Tags: 35=D; 40=4; 59=6 Available for: PUMA Equities; PUMA Derivatives, EntryPoint Access model: DMA and Desk trader

Step	Description	Expected result	Req	Stat	tus
C3.1	Customer: Send Stop Limit buy order, GTD  • 100@25,10  • Stop price: 25,00  TRADING CERTIFICATION: Send buy limit order, DAY  • 100@25,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@25,00  TRADING CERTIFICATION: Trade at price 25,00  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@25,00  TRADING CERTIFICATION: Trade at price 25,10	Order triggered and totally filled	N	Pass	N/E
C3.2	Customer: Send Stop Limit buy order, GTD  • 200@25,30; • Stop price: 25,20  TRADING CERTIFICATION: Send buy limit order, DAY • 100@25,20  TRADING CERTIFICATION: Send sell limit order, DAY • 100@25,20  TRADING CERTIFICATION: Trade at price 25,20  TRADING CERTIFICATION: Send sell limit order, DAY • 100@25,30  TRADING CERTIFICATION: Trade at price 25,30.	Order triggered and partially filled  Orders on book:  • Buy 100@25,30	N	Pass	N/E
C3.3	Customer: Cancels pending order • 100@25,30	Cancel pending order.	N	Pass	N/E
C3.4	TRADING CERTIFICATION: Cancel trade(s)	Trades cancelled	N	Pass	N/E



#### D. CROSS Orders with Validity DAY

Tags: 35=s

	Access model. Desk trader						
Step	Description	Expected Result	Req	Sta	atus		
D.1	Customer: Send limit Cross orders, DAY with SenderLocation BVMF and valid Entering Trader  • 100@20,00	Order total filled. Trade.	N	Pass	N/E		
D.2	Customer: Send limit Cross order, DAY with SenderLocation BVMF and invalid Entering Trader  • 100@20,00	Order rejected.	N	Pass	N/E		
D.3	Customer: Send limit Cross order, DAY with SenderLocation DMA and valid Entering Trader  • 100@20,00	Order rejected.	N	Pass	N/E		
D.4	TRADING CERTIFICATION: Cancel trade	Trade cancelled.	N	Pass	N/E		



#### E. Order entry with minimum quantity

Tags: 110=<100>

	Access model. Divin and Desk tradel						
Step	Description	Expected result	Req	Stat	us		
E.1	TRADING CERTIFICATION: Send 2 sell limit orders, DAY  • 100@20,00  Customer: Send buy limit order, DAY  • 200@20,00  • Minimum Quantity: 100	Partial and total order filled.	N	Pass	N/E		
E.2	Customer: Send buy limit order, DAY  • 200@20,00  • Minimum Quantity: 100	Order accepted and cancelled.	N	Pass	N/E		
E.3	TRADING CERTIFICATION: Send 2 sell limit orders, DAY  • 100@20,00  Customer: Send buy limit order, GTC  • 200@20,00  • Minimum Quantity: 100	Partial and total order filled.	N	Pass	N/E		
E.4	TRADING CERTIFICATION: Send 1 sell limit orders, DAY  • 100@20,00  Customer: Send a buy limit order, IOC/FAK  • 200@20,00  • Minimum Quantity: 100	Partial order filled. Order cancelled.	N	Pass	N/E		
E.5	TRADING CERTIFICATION: Send a sell Limit order, DAY  • 100@20,00  Customer: Send buy limit order, GTD  • 200@20,00  • Minimum Quantity: 100	Partial and total order filled.	N	Pass	N/E		



#### F. Order entry with disclosed quantity

Tags: 111=<100>

Step	Description	Expected result	Req	Status	
F.1	Customer: Send buy limit order, DAY  • 200@20,00  • Disclosed Quantity: 100  TRADING CERTIFICATION: Send 2 sell limit orders, DAY  • 100@20,00	Partial and total order filled.	N	Pass	N/E
F.2	Customer: Send buy limit order, GTC  • 200@20,00  • Disclosed quantity: 100  TRADING CERTIFICATION: Send 2 sell limit orders, DAY  • 100@20,00	Partial and total order filled.	N	Pass	N/E
F.3	TRADING CERTIFICATION: Send 1 sell limit orders, DAY  • 100@20,00  Customer: Send buy limit order, DAY  • 200@20,00  • Disclosed Quantity: 100	Partial order filled.  Orders on book:  • Buy 100@20,00	N	Pass	N/E
F.4	Customer: Send buy limit order, DAY • 100@20,00	Cancels pending order.	N	Pass	N/E



#### G. Order Entry with reserved instrument

Tags: 35=D; 40=2

	Access model: DMA and Desk trader								
Step	Description	Expected result	Req	Stat	us				
	TRADING CERTIFICATION: Change instrument state to Reserved								
G.1	Customer: Send buy limit order, DAY • 200@20,00  TRADING CERTIFICATION: Send sell limit order, DAY • 200@20,00	Order entry with executions on the instrument opening.  Orders on book:  Buy 200@20,00 Sell 200@20,00	Y	Pass	N/E				
G.2	Customer: Modify order quantity • 100@20,00	Rejection on modification.  Orders on book:  Buy 200@20,00 Sell 200@20,00	Y	Pass	N/E				
G.3	Customer: Cancel the buy order	Rejection on cancel  Orders on book:  Buy 200@20,00 Sell 200@20,00	Y	Pass	N/E				
G.4	Customer: Send buy limit order, DAY • 200@19,00	New order entry  Orders on book:  Buy 200@20,00 Buy 200@19,00 Sell 200@20,00	Y	Pass	N/E				
G.5	Customer: Modify order price (buy: 19,00) • 200@19,50	Modification order entry.  Orders on book:  Buy 200@20,00 Buy 200@19,50 Sell 200@20,00	Y	Pass	N/E				
G.6	Customer: Cancel buy order (19,50)	Order cancel Orders on book:  Buy 200@20,00 Sell 200@20,00	Y	Pass	N/E				
G.7	Customer: Send buy limit order, DAY • 200@21,00	New order entry  Orders on book:	Y	Pass	N/E				
G.8	Customer: Cancel buy order  200@20,00	Order cancel Orders on book:  Buy 200@21,00 Sell 200@20,00	Y	Pass	N/E				
G.9	TRADING CERTIFICATION: Modify the instrument state to Open	Order total filled	Y	Pass	N/E				
G.10	TRADING CERTIFICATION: Cancel all trades	Trades cancelled	Υ	Pass	N/E				



	H. MARKET ON CLOSE Orders							
	Availab	ole for: PUMA Equities						
Step	Description	Expected result	Req	Statu	ıs			
H.1	TRADING CERTIFICATION: Send buy limit order, DAY  • 100@20,00  Customer: Send sell ATC order  • 100@MOC	Order entry.  Orders on book:  • Buy 100@20,00 Sell 100@MOC	N	Pass	N/E			
H.2	TRADING CERTIFICATION: Send buy limit order, DAY  • 200@21,00  Customer: Send sell ATC order  • 200@MOC	Order entry  Orders on book:	N	Pass	N/E			
	TRADING CERTIFICATION: Set C	Closing Call and change Market state to On C	lose					
H.3	TRADING CERTIFICATION: Change Market state	ATC orders total filled. Open price: 21,00 Orders on book will be cancelled.	N	Pass	N/E			
H.4	TRADING CERTIFICATION: Cancel trades.	Trades cancelled.	N	Pass	N/E			



	H2. Ordens LIMIT ON CLOSE  Disponível em: PUMA Equities							
Step	Description	Expected result	Req	Statu	s			
H2.1	TRADING CERTIFICATION: Send buy limit order, DAY 100@20,00  Customer: Send sell LOC order 100@20	Order Entry.  Ordens on book:  Buy 100@20,00	N	Pass	N/E			
H2.2	TRADING CERTIFICATION: Send buy limit order, DAY 200@21,00  Customer: Send sell LOC order 100@20	Order Entry.  Ordens on book:  Buy 200@21,00 Buy 100@20,00	N	Pass	N/E			
H2.3	TRADING CERTIFICATION change status of instrument to reserved	No changes on book	N	Pass	N/E			
H2.4	TRADING CERTIFICATION change status of the instrument to Final Closing Call	LOC orders now appear on book.  Ordens on book:  Buy 200@21 Buy 100@20 Sell 100@20 Sell 200@20	N	Pass	N/E			
H2.5	TRADING CERTIFICATION: Change status of the instrument to CLOSED	LOC orders are executed.  Opening price: 21,00  Remaining orders canceled.	N	Pass	N/E			
H2.6	TRADING CERTIFICATION: Cancel trades.	Canc Trades cancelled.	N	Pass	N/E			



#### I. Self Trade Prevention

### Additional repeating group: 452=5 Available for: PUMA Equities; PUMA Derivatives Access model: DMA and Desk trader

Step	Description	Expected result	Req	Statu	ıs
l.1	Customer: Send buy limit order, DAY  • 100@20,00  • Investor ID: 12345678901 (tag 452=5; tag 447=D; tag 448=12345678901)  Customer: Send a sell limit order, DAY, don't identify the cancel action (tag 35539)  • 100@20,00  • Investor ID: 12345678901  • (tag 452=5; tag 447=D; tag 448=12345678901)	Buy order is accepted  Sell order is accepted and then eliminated (tag 378=103)	Z	Pass	N/E
1.2	Customer: Send sell limit order, DAY	Sell order is accepted	N	Pass	N/E
1.3	Customer: Modifies pending sell order, identifying the cancellation of aggressor order (tag 35539=1)  From: 100@21,00  Modify to: 100@20,00  Investor ID: 12345678901  (tag 452=5; tag 447=D; tag 448=12345678901)	Sell order is replaced and then eliminated (tag 378=103)	N	Pass	N/E
1.4	Customer: Send sell limit order, DAY	Order total filled	N	Pass	N/E
1.5	Customer: Send buy limit order, DAY  • 100@20,00  • Investor ID: 12345678901 (tag 452=5; tag 447=D; tag 448=12345678901)  Customer: Send sell limit order, DAY, identifying the cancellation of resting order (tag 35539=2)  • 100@20,00  • Investor ID: 12345678901 (tag 452=5; tag 447=D; tag 448=12345678901)	Buy order is accepted  Sell order is accepted and then the buy order is eliminated (tag 378=107)	N	Pass	N/E
1.6	Customer: Send sell limit order, DAY, identifying the cancellation of both orders, bid and sell (tag 35539=3)  100@20,00  Investor ID: 12345678901  (tag 452=5; tag 447=D; tag 448=12345678901)	Buy order is accepted and then eliminated (tag 378=103) Sell order is eliminated (tag 378=107)	N	Pass	N/E
1.7	Customer: Send sell limit order, DAY, identifying the cancellation of resting order (tag 35539=3)  • 100@20,00  Customer: Send sell limit order, DAY  • 100@20,00  • Investor ID: 12345678901 (tag 452=5; tag 447=D; tag 448=12345678901)  Customer: Send buy limit order, DAY, identifying the cancellation of both orders, bid and sell (tag 35539=3)  • 200@20,00  • Investor ID: 12345678901 (tag 452=5; tag 447=D; tag 448=12345678901)	Sell orders are accepted  Buy order is accepted and traded generated (100@20,00)  Remain order quantity (100@20,00) is eliminated (tag 378 = 103)  Sell order is eliminated (tag 378=107)	N	Pass	N/E



#### J. Market Operation - Trade on Behalf

Available for: PUMA Equities; PUMA Derivatives Access model: Desk Trader

In order to execute this scenario, you will need:
Two SenderCompID, A and B, that will be used by the supervisor and the operator
Two Entering Trader, one in the role of operator (OPE), one in the role of supervisor (SUP) – Contact Trading Certification to set this configuration

Step	Description	Expected result	Req	Statu	ıs
J.1	Customer: Send Buy limit order, DAY	Buy order is accepted  Order is modified	N	Pass	N/E
J.2	Customer: Send Buy limit order, DAY	Order Rejected	N	Pass	N/E
J.2	Customer: Send Buy limit order, DAY	Buy order is accepted  Order modification Rejected	N	Pass	N/E



		K1. Forward					
	Tag 35=R						
0:		ntryPoint Access model: DMA and Desk trade					
Step	Description	Expected result	Req	Statu	IS		
	TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00						
K1.1	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  TRADING CERTIFICATION: accept the forward declaration	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution	N	Pass	N/E		
		reports, with the tag 150=F.					
K1.2	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)	N	Pass	N/E		
	TRADING CERTIFICATION: reject the forward declaration	The declaration is rejected. Receives Quote Request Reject (35=AG)			ļ		
K1.3	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is cancelled. Receives	N	Pass	N/E		
	TRADING CERTIFICATION: cancel the forward declaration	Quote Status Report (35=AI) with the tag 297=17 and the tag 35005=2 (Cancel)					
K1.4	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 12345  • TAG 5706 (FixedRate): 0.21	The declaration is rejected. Receives Quote Request Reject (35=AG)	N	Pass	N/E		
K1.5	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  Customer: Send forward cancelation (35=Z)	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New) The declaration is cancelled. Receives	N	Pass	N/E		
		Quote Status Report (35=AI) with the tag 297=17 and the tag 35005=2 (Cancel)					
K1.6	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  Customer: Send forward cancelation (35=Z) with an invalid value for tag 117 (QuoteID)	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is NOT cancelled. Receives Quote Status Report (35=Al) with the tag 297=9 (Quote Not Found) e 35005 = 3 (reject)	Ν	Pass	N/E		
K1.7	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)	N	Pass	N/E		
	TRADING CERTIFICATION: accept the forward declaration						



	TRADING CERTIFICATION: cancel the forward execution	The declaration is accepted. Receives Quote message (35=S) and 2 execution reports, with the tag 150=F.  Receives 2 execution reports, with the tag 150=H			
K1.8	Customer: Send cross forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21	Receives 2 Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  Receives 4 execution reports, with the tag 150=F.	N	Pass	N/E
K1.9	Customer: Send forward declaration (buy) as a DMA  100@20,00 TAG 5497 (DaysToSettlement): 50 TAG 5706 (FixedRate): 0.21 SenderLocation: DMA  TRADING CERTIFICATION: accept the forward	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution reports, with the tag 150=F.	N	Pass	N/E



	к	2. Forward + Cash						
		or: PUMA Equities EntryPoint nodel: DMA and desk trader						
Step	Description	Expected result	Req	Statu	ıs			
	TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00							
K2.1	Customer: Send forward declaration (buy)  100@20,00  TAG 5497 (DaysToSettlement): 50  TAG 5706 (FixedRate): 0.21  TAG 35004 (ExecuteUnderlyingTrade): 1  TRADING CERTIFICATION: accept the forward	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution	N	Pass	N/E			
	declaration	reports, with the tag 150=F.						
K2.2	Customer: Send forward declaration (buy)  100@20,00  TAG 5497 (DaysToSettlement): 50  TAG 5706 (FixedRate): 0.21  TAG 35004 (ExecuteUnderlyingTrade): 1	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)	Ν	Pass	N/E			
	TRADING CERTIFICATION: reject the forward declaration	The declaration is rejected. Receives Quote Request Reject (35=AG)						
K2.3	Customer: Send forward declaration (buy)  100@20,00  TAG 5497 (DaysToSettlement): 50  TAG 5706 (FixedRate): 0.21  TAG 35004 (ExecuteUnderlyingTrade): 1	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)	N	Pass	N/E			
	TRADING CERTIFICATION: cancel the forward declaration	The declaration is cancelled. Receives Quote Status Report (35=AI) with the tag 297=17 and the tag 35005=2 (Cancel)						
K2.4	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  • TAG 35004 (ExecuteUnderlyingTrade): 1  TRADING CERTIFICATION: accept the forward	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution		Pass	N/E			
	declaration  TRADING CERTIFICATION: cancel the forward execution	reports, with the tag 150=F.  Receives 2 execution reports, with the tag 150=H						
K2.5	Customer: Send forward declaration (buy)  100@20,00  TAG 5497 (DaysToSettlement): 50  TAG 5706 (FixedRate): 0.21  TAG 35004 (ExecuteUnderlyingTrade): 1	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is cancelled. Receives Quote Status Report (35=AI) with the tag	N	Pass	N/E			
	Customer: Send forward cancelation (35=Z)	297=17 and the tag 35005=2 (Cancel)						
K2.6	Customer: Send forward declaration (buy)  100@20,00  TAG 5497 (DaysToSettlement): 12345  TAG 5706 (FixedRate): 0.21  TAG 35004 (ExecuteUnderlyingTrade): 1	The declaration is rejected. Receives Quote Request Reject (35=AG)	N	Pass	N/E			



K2.7	Customer: Send forward declaration (buy) as a DMA  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  • TAG 35004 (ExecuteUnderlyingTrade): 1  • SenderLocation: DMA  TRADING CERTIFICATION: accept the forward declaration	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution reports, with the tag 150=F.		Pass	N/E
K2.8	TRADING CERTIFICATION: cancel the sell limit order, DAY  Customer: Send forward declaration (buy)  100@20,00  TAG 5497 (DaysToSettlement): 50  TAG 5706 (FixedRate): 0.21  TAG 35004 (ExecuteUnderlyingTrade): 1	The declaration is rejected. Receives Quote Request Reject (35=AG)	N	Pass	N/E



	K3. For	ward Cash Registered					
	Available for: PUMA Equities; EntryPoint Access model: DMA and desk trader						
Step	Description	Expected result	Req	Statu	IS		
	TRADING CERTIFICATION: Execute trades and give the number to the participant, during this scenario execution  TRADING CERTIFICATION: Send sell limit order, DAY  • 100@20,00						
K3.1	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  • TAG 35004 (ExecuteUnderlyingTrade): 0  • TAG 6032 (Unique TradeID): trade number  TRADING CERTIFICATION: accept the forward declaration	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution reports, with the tag 150=F.	N	Pass	N/E		
K3.2	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  • TAG 35004 (ExecuteUnderlyingTrade): 0  • TAG 6032 (Unique TradeID): trade number  TRADING CERTIFICATION: reject the forward declaration	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is rejected. Receives Quote Request Reject (35=AG)	N	Pass	N/E		
K3.3	Customer: Send forward declaration (buy)  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  • TAG 35004 (ExecuteUnderlyingTrade): 0  • TAG 6032 (Unique TradeID): trade number  TRADING CERTIFICATION: cancel the forward declaration	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is cancelled. Receives Quote Status Report (35=AI) with the tag 297=17 and the tag 35005=2 (Cancel)	N	Pass	N/E		
K3.4	Customer: Send forward declaration (buy)  100@20,00 TAG 5497 (DaysToSettlement): 50 TAG 5706 (FixedRate): 0.21 TAG 35004 (ExecuteUnderlyingTrade): 0 TAG 6032 (Unique TradeID): trade number  TRADING CERTIFICATION: accept the forward declaration  TRADING CERTIFICATION: cancel the forward execution	Pending forward declaration. Receives Quote Status Report (35=AI) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution reports, with the tag 150=F.  Receives 2 execution reports, with the tag 150=H	N	Pass	N/E		
K3.5	Customer: Send forward declaration (buy) as a DMA  • 100@20,00  • TAG 5497 (DaysToSettlement): 50  • TAG 5706 (FixedRate): 0.21  • TAG 35004 (ExecuteUnderlyingTrade): 0  • TAG 6032 (Unique TradeID): trade number  • SenderLocation: DMA  TRADING CERTIFICATION: accept the forward declaration	Pending forward declaration. Receives Quote Status Report (35=Al) with the tag 297 (QuoteStatus) = 10 (Pending) and the tag 35005=0 (New)  The declaration is accepted. Receives Quote message (35=S) and 2 execution reports, with the tag 150=F.	N	Pass	N/E		



	L1. Exercise							
	Available for: PUMA Equities; EntryPoint Access model: DMA and desk trader							
Step	Description	Expected result	Req	Statu	ıs			
L.1	Customer: Send an option exercise	Customer receives 35=AM with the tag 722=3 (Completed)	N	Pass	N/E			
L.2	Customer: Send sell limit order, DAY, in the option from exercise above  • 100@20,00  • Account: anyone but A  Customer: Send buy limit order, DAY, in the option from exercise above  • 100@20,00  • Account: A	Customer receives Execution Report with the tag 150=F  Customer receives 35=AM with the tag 709=101 (Auto blocking of short option position)	N	Pass	N/E			

	L2. Automatic Exercise of Options on Equities, Units and ETFs  Available for: PUMA Equities; EntryPoint  Access model: DMA and desk trader						
Step	Step Description Expected result Req Status						
L2.1	TRADING CERTIFICATION: B3 loads in the money available options position in the security list.  Customer: Send a contrary exercise to not exercise this position automatically.	Receive a contrary exercise execution report.	N	Pass	N/E		
L2.2		Receive a contrary exercise cancellation execution report.	N	Pass	N/E		
	TRADING CERTIFICATION: Change the price of the underlying instrument to keep the strike of the options position at the money.  Customer: Send a contrary exercise to exercise this position automatically.	Receives a contrary exercise execution report.	Z	Pass	N/E		
L2.4	TRADING CERTIFICATION: Cancel the contrary exercise sent before on L2.3 scenario.	Receive a contrary exercise cancellation execution report.	N	Pass	N/E		
	TRADING CERTIFICATION: Change the price of the underlying instrument to keep the strike of the options position out of the money.  Customer: Send a contrary exercise to exercise this position automatically even it is out of the money.	Receive a contrary exercise execution report.	N	Pass	N/E		
L2.6		Receive a rejection contrary exercise execution report.	N	Pass	N/E		
L2.7	Customer: Send a contrary exercise to not automatically exercise an option available in the security list without any client position.	Receive a rejection contrary exercise execution report.	N	Pass	N/E		
L2.8	Customer: Send a contrary exercise to exercise an option not available in the security list.	Receive a rejection contrary exercise execution report.	N	Pass	N/E		
L2.9	Customer: Send a contrary exercise to not exercise an option not available in the security list.	Receive a rejection contrary exercise execution report.	N	Pass	N/E		



M1. LINE5.0 - EQT  Access: All  Define the instrument								
	Define one valid account  Define one transition account							
Step	Description	Expected Result	Req	Sta	itus			
M1.1	Trading Certification: Removes authorized market permission  Customer: Sends a buy order	The order will be rejected, indicating the costumer is not allowed to send orders.	S	Pass	N/E			
M1.2	Trading Certification: Allows authorized market permission to sell orders.  Customer: Sends a buy order	The order will be rejected, indicating the costumer is not allowed to send buy orders.	S	Pass	N/E			
M1.3	Trading Certification: Allows authorized market permission to buy orders.  Customer: Sends a sell order	The order will be rejected, indicating the costumer is not allowed to send sell orders.	S	Pass	N/E			
M1.4	Trading Certification: Market authorized Sets TMOC and TMOV metrics value to 2.000  Customer: Sends a buy order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for TMOC	S	Pass	N/E			
M1.5	Customer: Sends a sell order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for TMOV	S	Pass	N/E			
M1.6	Sets SPCI and SPVI metrics value to 2.000  Customer: Sends a buy order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for SPCI	S	Pass	N/E			
M1.7	Customer: Sends a sell order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for SPVI	S	Pass	N/E			
M1.8	Sets SDP metric value to 1.000  Customer: Sends a buy order, qty 100  @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for SDP	S	Pass	N/E			
M1.9	Trading Certification: Sets limits of R\$ 1,000 on SFD measure for the DocID. For all the other metrics, sets 999.999  Customer: Sends buy limit order	The third order will be rejected, and the customer will be informed that the DocID is on Protected Mode and will be able to send orders only to inventory reduction of shares and contracts.	S	Pass	N/E			



M1.10	Trading Certification: cancels all customer's orders and trades  Trading Certification: Deactivates the protected mode	Open orders and trades will be canceled.	S	Pass	N/E
M1.11	Authorized Market of Forward. Instrument: PETR4T.  Trading Certification: Sets limits of 100 on STD measure  Customer: Sends forward declaration (buy) for PETR4T: 100@20.00	The forward declaration will be rejected, and the customer will be informed that it exceeded the STD measure for the DocID.	S	Pass	N/E
M1.12	Customer: Sends buy limit order of 500  Trading Certification: Sends sell limit order of 300 at the same price to partial fill.	The order will be accepted, and the trade will be partial filled.	S	Pass	N/E
M1.13	Trading Certification: Manually enables the Protected Mode for the DocID.	The order will be canceled. The customer will be able to validate tag 378=201 (RiskManagement Cancellation)	S	Pass	N/E
M1.14	Customer: Sends sell limit order of 100 shares	The order will be accepted.	S	Pass	N/E
M1.15	Operations Desk access: Customer: Sends sell limit order but does not inform the account.	The order will be rejected, and the customer will be informed that the account information is required when the Protected Mode is active.  Rejection: Account's protected mode under activation.	S	Pass	N/E
M1.16	Customer: Sends sell limit order informing a transitory account (Master).	The order will be rejected, and the customer will be informed that transitory accounts are not allowed to trade when the Protected Mode is active.  Rejection: Transient Account is hierarchically blocked on protected mode.	S	Pass	N/E
M1.17	Trading Certification: Deactivates the protected mode.	The protected mode will be disabled.	S	Pass	N/E
M1.18	Trading Certification: Blocks a DocID.  Customer: Sends a buy limit order informing an account under the blocked DocID.	The order will be rejected, and the customer will be informed the the DocID is blocked for trading.  Rejection: Document negotiation blocked.	S	Pass	N/E
M1.19	Trading Certification: Blocks an Account belonging to a DocID account with more than one account.  Customer: Sends a buy limit order informing the blocked account.	The order will be rejected, and the customer will be informed that the account is blocked.  Rejeição: Account negotiation blocked.	S	Pass	N/E
M1.20	Operations Desk access: Trading Certification: Blocks a trader.  Customer: Sends a buy limit order through a Desk session (BVMF Sender Location) informing the blocked trader.	The order will be rejected, and the customer will be informed that the trader is blocked.  Rejeição: Entering Trader negotiation blocked.	S	Pass	N/E
M1.21	Premise: The broker's Capture Account must have limits.  Operations Desk access Customer: Sends buy limit order of 100 contracts but does not inform the account.	The order will be accepted.	S	Pass	N/E



M1.22	Premise: The broker's Capture Account must have limits. Operations Desk access Customer: Modifies the order adding the account information on tag 1.	The order modification will be accepted.	S	Pass	N/E
M1.23	Premise: The broker's Capture Account must have limits. Operations Desk access Customer: Modifies the order changing the account information on tag 1	The order modification will be accepted	S	Pass	N/E
M1.24	Premise: The broker's Capture Account must have limits. Operations Desk access  Customer: Modifies the order removing the account information on tag 1	The order modification will be rejected.	S	Pass	N/E
M1.25	<b>Customer:</b> Sends a buy limit order informing an account that <b>is not</b> registered on the Brokerage house.	The order will be rejected, and the customer will be informed that the account is unknown.  Rejection: Account not available.	Ø	Pass	N/E
M1.26	Operations Desk access Customer: Sends a buy limit order informing a trader who is not registered on the Brokerage house.	The order will be rejected, and the customer will be informed that the trader is unknown.  Rejection: Entering Trader not available.	S	Pass	N/E
M1.27	Operations Desk access The Entering Trader has all limits. The broker's Capture Account does not have limits. Customer: Sends buy limit order but does not inform the account.	The order will be rejected, and the customer will be informed that the Capture Account does not have configured limits.	S	Pass	N/E

	M2. LINE5.0 - DRV  Access: All  Define the instrument  Define one valid account  Define one transition account							
Step	Description	Expected Result	Req	Sta	itus			
M2.1	Trading Certification: Removes authorized market permission  Costumer: Sends a buy order	The order will be rejected, indicating the costumer is not allowed to send orders.	S	Pass	N/E			
M2.2	Trading Certification: Allows authorized market permission to sell orders.  Costumer: Sends a buy order	The order will be rejected, indicating the costumer is not allowed to send buy orders.	S	Pass	N/E			
M2.3	Trading Certification: Allows authorized market permission to buy orders.  Costumer: Sends a sell order	The order will be rejected, indicating the costumer is not allowed to send sell orders.	S	Pass	N/E			
M2.4	Trading Certification: Market authorized Sets TMOC and TMOV metrics value to 2.000  Costumer: Sends a buy order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for TMOC	S	Pass	N/E			
M2.5	Costumer: Sends a sell order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for TMOV	S	Pass	N/E			



	Sets SPCI and SPVI metrics value to				
M2.6	2.000 Costumer: Sends a buy order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for SPCI	S	Pass	N/E
M2.7	Costumer: Sends a sell order, qty 200 @15	The order will be rejected, indicating the costumer exceeded the maximum value configured for SPVI	S	Pass	N/E
M2.8	Trading Certification: Sets limits of R\$ 1,000 on SFD measure for the DocID. For all the other metrics, sets 999.999  Customer: Sends buy limit order	The third order will be rejected, and the customer will be informed that the DocID is on Protected Mode and will be able to send orders only to inventory reduction of shares and contracts.	S	Pass	N/E
M2.9	Trading Certification: cancels all customer's orders and trades  Trading Certification: Deactivates the protected mode	Open orders and trades will be canceled.	S	Pass	N/E
M2.10	Trading Certification: Sets Risk measure to 1  Customer: Sends buy limit order of 100 contracts @10,00.	The order will be rejected, and the customer will be informed that it exceeded the Risk measure for the DocID.  Rejection: [RKMT] Document: Order quantity exceeded Max Market Risk.	S	Pass	N/E
M2.11	Customer: Sends buy limit order of 500  Trading Certification: Sends sell limit order of 300 at the same price to partial fill.	The order will be accepted, and the trade will be partial filled.	S	Pass	N/E
M2.12	Trading Certification: Manually enables the Protected Mode for the DocID.	The order will be canceled. The customer will be able to validate tag 378=201 (RiskManagement Cancellation)	S	Pass	N/E
M2.13	Customer: Sends sell limit order of 100 shares	The order will be accepted.	S	Pass	N/E



M2.14	Operations Desk access: Customer: Sends sell limit order but does not inform the account.	The order will be rejected, and the customer will be informed that the account information is required when the Protected Mode is active.  Rejection: Account's protected mode under activation.	S	Pass	N/E
M2.15	Customer: Sends sell limit order informing a transitory account (Master).	The order will be rejected, and the customer will be informed that transitory accounts are not allowed to trade when the Protected Mode is active.  Rejection: Transient Account is hierarchically blocked on protected mode.	S	Pass	N/E
M2.16	<b>Trading Certification:</b> Deactivates the protected mode.	The protected mode will be disabled.	S	Pass	N/E
M2.17	Trading Certification: Blocks a DocID.  Customer: Sends a buy limit order informing an account under the blocked DocID.	The order will be rejected, and the customer will be informed the the DocID is blocked for trading.  Rejection: Document negotiation blocked.	S	Pass	N/E
M2.18	Trading Certification: Blocks an Account belonging to a DocID account with more than one account.  Customer: Sends a buy limit order informing the blocked account.	The order will be rejected, and the customer will be informed that the account is blocked.  Rejeição: Account negotiation blocked.	S	Pass	N/E
M2.19	Operations Desk access: Trading Certification: Blocks a trader.  Customer: Sends a buy limit order through a Desk session (BVMF Sender Location) informing the blocked trader.	The order will be rejected, and the customer will be informed that the trader is blocked.  Rejeição: Entering Trader negotiation blocked.	S	Pass	N/E
M2.20	Premise: The broker's Capture Account must have limits.  Operations Desk access Customer: Sends buy limit order of 100 contracts but does not inform the account.	The order will be accepted.	S	Pass	N/E
M2.21	Premise: The broker's Capture Account must have limits. Operations Desk access Customer: Modifies the order adding the account information on tag 1.	The order modification will be accepted.	S	Pass	N/E
M2.22	Premise: The broker's Capture Account must have limits.  Operations Desk access  Costumer: Modifies the order changing the account information on tag 1	The order modification will be accepted	S	Pass	N/E
M2.23	Premise: The broker's Capture Account must have limits. Operations Desk access Costumer: Modifies the order removing the	The order modification will be rejected.	S	Pass	N/E
M2.24	account information on tag 1  Customer: Sends a buy limit order informing an account that is not registered on the Brokerage house.	The order will be rejected, and the customer will be informed that the account is unknown.	S	Pass	N/E
M2.25	Operations Desk access Customer: Sends a buy limit order informing a trader who is not registered on the Brokerage house.	Rejection: Account not available.  The order will be rejected, and the customer will be informed that the trader is unknown.  Rejection: Entering Trader not available.	S	Pass	N/E



M2.26	Operations Desk access The Entering Trader has all limits. The broker's Capture Account does not have limits. Customer: Sends buy limit order but does not inform the account.	The order will be rejected, and the customer will be informed that the Capture Account does not have configured limits.	S	Pass	N/E	
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	N. Ca	ncel on disconnect							
	Available for: PUMA Equities; EntryPoint  Access model: DMA and desk trader								
Step									
N.1	Customer: Send logon message with tags 35002=0 and 35003=0	FIX session connected	N	Pass	N/E				
N.2	Customer: Send a buy limit order, DAY  • 100@20,00  Customer: Send a buy limit order, GTC  • 100@21,00  Customer: Send a buy limit order, GTD  • 100@22,00	Order entry  Orders on book:  • 100 @ 22,00 (GTD)  • 100@21,00 (GTC)  • 100@20,00 (DAY)	N	Pass	N/E				
N.3	Customer: Disconnect the application by Task Manager or disconnect network cable	FIX session disconnected	N	Pass	N/E				
N.4	Customer: Send a logon message with TAGs 35002=0 and 35003=0  Customer: send a resend request message (35=2)	FIX session reconnected Orders on book:  • 100 @22,00 (GTD)  • 100@21,00 (GTC) 100@20,00 (DAY)	Z	Pass	N/E				
N.5	Customer: Send a logout message	FIX session disconnected	N	Pass	N/E				
N.6	Customer: Send a logon message with TAGs 35002=0 and 35003=0  Customer: send a resend request message (35=2)	FIX session reconnected Orders on book:	N	Pass	N/E				
N.7	Customer: Disconnect FIX session	FIX session disconnected	N	Pass	N/E				
N.8	Customer: Send logon message with TAGS 35002=1 and 35003=30000	FIX session connected	N	Pass	N/E				
N.9	Customer: Disconnect the application by Task Manager or disconnect network cable	FIX session disconnected	N	Pass	N/E				
	Wait less than	the time set in COD trigger							
N.10	Customer: Send logon message with TAGs 35002=1 and 35003=30000  Customer: send a resend request message (35=2)	FIX session reconnected  Orders on book: FIX session reconnected Orders on book:  • 100 @22,00 (GTD)  • 100@21,00 (GTC)  • 100@20,00 (DAY)	N	Pass	N/E				
N.11	Customer: Send logout message	FIX session disconnected	N	Pass	N/E				
	Wait longer tha	n the time set in COD trigger							
N.12	Customer: Send logon message with TAGs 35002=1 and 35003=30000  Customer: send a resend request message (35=2)	FIX session reconnected  Orders on book:	N	Pass	N/E				
N.13	Customer: Disconnect the application by Task Manager or disconnect network cable	FIX session disconnected	N	Pass	N/E				



	Wait longer than	the time set in COD trigger			
N.14	Customer: Send logon message with TAGs 35002=1 and 35003=30000  Customer: send a resend request message (35=2)	FIX session reconnected  Customer receives order cancel message and confirm the receipt of Execution Report 35=8 and TAG 150=4 for the day order  Orders on book:  100 @22,00 (GTD) 100 @21,00 (GTC)	N	Pass	N/E
N.15	Customer: Send logout message	FIX session disconnected	N	Pass	N/E
N.16	Customer: Send logon message with TAGs 35002=2 and 35003=30000	FIX session connected	N	Pass	N/E
N.17	Customer: Send a buy limit order, DAY • 100@20,00	Order entry  Orders on book:  • 100 @22,00 (GTD)  • 100@21,00 (GTC)  • 100@20,00 (DAY)	N	Pass	N/E
N.18	Customer: Send logout message	FIX session disconnected	N	Pass	N/E
	Wait less than	the time set in COD trigger		<u> </u>	
N.19	Customer: Send logon message with TAGs 35002=2 and 35003=30000  Customer: send a resend request message (35=2)	FIX session reconnected Orders on book:  • 100 @22,00 (GTD)  • 100@21,00 (GTC)  • 100@20,00 (DAY)	N	Pass	N/E
N.20	Customer: Disconnect the application by Task Manager or disconnect network cable	FIX session disconnected	N	Pass	N/E
	Wait longer than	n the time set in COD trigger			•
N.21	Customer: Send logon message with TAGs 35002=2 and 35003=30000  Customer: send a resend request message (35=2)	FIX session reconnected  Orders on book:	N	Pass	N/E
N.22	Customer: Send logout message	FIX session disconnected	N	Pass	N/E
	Wait longer than	n the time set in COD trigger		ı	
N.23	Customer: Send logon message with TAGs 35002=2 and 35003=30000  Customer: send a resend request message (35=2)	FIX session reconnected  Customer receives order cancel message and confirm the receipt of Execution Report 35=8 and TAG 150=4 for the day order  Orders on book:  100 @22,00 (GTD) 100@21,00 (GTC)	N	Pass	N/E
N.24	Customer: Send logout message	FIX session disconnected	N	Pass	N/E



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N.24	Customer: Send logout message	FIX session disconnected	N	Pass	N/E
N.25	Customer: Send logon message with TAGs 35002=3 and 35003=30000	FIX session connected	N	Pass	N/E
N.26	Customer: Send a buy limit order, DAY • 100@20,00	Order entry  Orders on book:  • 100 @22,00 (GTD)  • 100@21,00 (GTC)  • 100@20,00 (DAY)	N	Pass	N/E
N.27	Customer: Disconnect the application by Task Manager or disconnect network cable	FIX session disconnected	N	Pass	N/E
	Wait less than	the time set in COD trigger			
N.28	Customer: Send logon message with TAGs 35002=3 and 35003=30000  Customer: send a resend request message (35=2)	FIX session reconnected  Orders on book: FIX session reconnected Orders on book:  • 100 @22,00 (GTD)  • 100@21,00 (GTC)  • 100@20,00 (DAY)	N	Pass	N/E
N.29	Customer: Send logout message	FIX session disconnected	N	Pass	N/E
	Wait longer tha	n the time set in COD trigger			
N.30	Customer: Send logon message with TAGs 35002=3 and 35003=30000  Customer: send a resend request message (35=2)	Customer receives order cancel message and confirm the receipt of Execution Report 35=8 and TAG 150=4 for the day order  Orders on book:  100 @ 22,00 (GTD) 100@21,00 (GTC)	N	Pass	N/E
N.31	Customer: Send a buy limit order, DAY • 100@20,00	Order entry  Orders on book:  • 100 @22,00 (GTD)  • 100@21,00 (GTC)  • 100@20,00 (DAY)	N	Pass	N/E
N.32	Customer: Disconnect the application by Task Manager or disconnect network cable	FIX session disconnected	N	Pass	N/E
	Wait longer tha	n the time set in COD trigger			
N.33	Customer: Send logon message with TAGs 35002=3 and 35003=30000  Customer: send a resend request message (35=2)	Customer receives order cancel message and confirm the receipt of Execution Report 35=8 and TAG 150=4 for the day order  Orders on book:  100 @22,00 (GTD) 100@21,00 (GTC)	N	Pass	N/E



Tag 35=c	
lable for: PUMA Equities; EntryPoint Access	
model: DMA and dock trader	

O. UDS Creation and Trades

	Available for: PUMA Equities; EntryPoint Access model: DMA and desk trader							
Step	Description	Expected result	Req	Statu	ıs			
O.1	Customer: Send request for instrument creation with two legs for the same instrument (Eg: B1 VALE3 + S1 VALE3)	Customer receives Security Definition message 35=d with TAG 323=5 (Rejected)	N	Pass	N/E			
O.2	Customer: Send request for instrument creation with two legs for different instruments Cash/Cash (ex: B1 VALE3 + S1 VALE5)		N	Pass	N/E			
O.3	Customer: Send request for instrument creation with two legs for different instruments Cash/Options (Eg: B1 PETR4 + S1 PETRF74)	Customer receives Security Definition message 35=d with TAG 323=1 (Accepted)	N	Pass	N/E			
O.4	Customer: Send request for instrument creation with two legs for different instruments Options/Options (Eg: B1 PETRF25 + S1 PETRF28)	Customer receives Security Definition message 35=d with TAG 323=1 (Accepted)	N	Pass	N/E			
O.5	Customer: Send request for instrument creation with three legs for different instruments Options/Options/Options (Eg: B1 UGPAA20 + S2 UGPAA22 + B1 UGPAA26)		N	Pass	N/E			

	CTC changes UDS state to Forbidden, reserve the instrument and authorize the order entry						
O.6	Customer: Send buy limit order, DAY in an already created UDS  • 100@20,00	New order entry on book for created strategy.	N	Pass	N/E		
0.7	Trading Certification: Send sell limit order, DAY  • 100@20,00	New sell order entry on book: • 100@20,00	N	Pass	N/E		
O.8	Trading Certification: Change instrument state to Open	Customer receives Execution Report:      1 Execution Report for UDS      1 Execution Report for each leg of UDS	N	Pass	N/E		

	P. Message Replay								
	Available for: PUMA Equities; EntryPoint Access  Access model: DMA and desk trader								
Step	Description	Expected result	Req	Statu	IS				
P.1	Customer: Logon  Customer: Send 500 buy limit orders, day Customer: Log out  Trading Certification: Cancel the orders  Customer: Logon with tag 141=N Reset sequence reset flag active	Receive the 35033=Y on the sequence reset message  Important note: On production you receive this tag for over 2000 lost messages. On certification this feature requests only 500 lost messages. Lower quantities you can recover by resent request (35=2)	Ν	Pass	N/E				



	Q. Market Maker Protection							
	Available for: PUMA Equities; Puma Derivatives							
Step	Description	Expected result	Req	Statu	IS			
	Wait for Trading Certification set Protected Mode to the selected trading group	Orders filled						
Q.1	Customer: Send DAY limit orders to the group's instruments	Remaining orders are canceled	N	Pass	N/E			
	Trading Certification: fill the orders until they reach Protected Mode	Customer receives Execution Report for each cancelled order with the tag:						
	Customer: Sends orders after they reach Protection Mode	• 378=200						
	Wait for Trading Certification change the group state to Pre-open and sets again the Protected Mode	Order's role Theoretical Price will remain on Book						
Q.2	Customer: Sends DAY limit orders to the group's instruments until they reach Protected Mode  Customer: Reset Protection Mode with tag 9773=Y	Customer receives Execution Report for each cancelled order with the tag: 378=200	N	Pass	N/E			
	sending a New Order Single (35=D)  Customer: Sends a new DAY Limit order	Order is accepted						



# R. RLP - Retail Liquidity Provider

Tags: 40=W (RLP); 35487=1 (RLT)

	Disponível em: PUMA Equities; PUMA Derivativos Modelos de acesso: Mesa e DMA Cliente deve utilizar conta: 123  Step							
Step	Description	Expected result	Req	Statu	IS			
R.1	Client: Send a BUY Order RLP, Quantity: 1000, does not inform Price.  Client: Send a SELL Order RLP, Quantity: 1000, does not inform Price.  Trading Certification: Send Orders BUY: Quantity 100@35,00 SELL: Quantity 100@35,05  Client: Send a BUY Order (RLT), Quantity: 100@35,05	Partial fill of RLP order (100@35,05), remaining quantity 900 of RLP order.	N	Pass	N/E			
R.2	Client: Send a BUY Order RLP, Quantity: 1000, does not inform Price.  Client: Send a SELL Order RLP, Quantity: 1000, does not inform Price.  Trading Certification: Send Orders BUY: Quantity 100@35,00  Client: Send a SELL Order RLP, Quantity: 100 @35,05  Client: Send a BUY Order (RLT) Quantity: 100@35,05	Order filled (100@35,05).	N	Pass	N/E			
R.3	Client: Send a BUY Order RLP, Quantity: 1000, does not inform Price.  Client: Send a SELL Order RLP, Quantity: 1000, does not inform Price.  Trading Certification: Send Orders BUY: Quantity 100@35,00  Client: Send a SELL Order, Quantity: 10 @35,00  Client: Send a BUY Order (RLT) Quantity: 15@35,05	Order filled (10@35,00)  Partial fill of RLP order (5@35,05), remaining quantity 995 of RLP order.	N	Pass	N/E			



R.4	Client: Send a BUY Order RLP, Quantity: 1000, does not inform Price.  Client: Send a SELL Order RLP, Quantity: 10, does not inform Price.  Trading Certification: Send Orders BUY: Quantity 5@35,00 SELL: Quantity 5@35,05  Client: Send a BUY Order (RLT) Quantity: 15@35,05	RLP order filled (10@35,05) Sell order filled (5@35,05).	N	Pass	N/E
R.5	Client: Send a BUY Order RLP, Quantity: 1000, does not inform Price.  Client: Send a SELL Order RLP, Quantity: 10, does not inform Price.  Trading Certification: Send Orders BUY: Quantity 5@35,00 SELL: Quantity 5@35,05  Client: Send a BUY Order (RLT) Quantity: 20@35,05	RLP Order filled (10@35,05) (10@35,05) Sell order Filled (5@35,05). Remaining quantity (5@35,05) of buy order.	N	Pass	N/E
R.6	Client: Send a BUY Order RLP, Quantity: 1000, does not inform Price.  Client: Send a SELL Order RLP, Quantity: 1000, does not inform Price.  Trading Certification: Send Orders BUY: Quantity 100@35,00 SELL: Quantity 100@35,10  Client: Send a BUY Order (RLT) Quantity: 100@35,10	Partial fill of RLP (@35,09)	Z	Pass	N/E
R.7	Client: Send a BUY Order RLP, Quantity: 1000, does not inform Price.  Client: Send a SELL Order RLP, Quantity: 1000, does not inform Price.  Client: Send a BUY Order Waived Priority (35487=2), Quantity 1000@35,00.  Client: Send a SELL Order, Quantity 1000@35,01.  Client: Send a BUY Order (RLT) Quantity: 100@35,01  Client: Send a SELL Order (RLT) Quantity: 100@35,00.	Partial fill of SELL Order (100@35,01)  Partial fill of RLP BUY Order (100@35,00). BUY Order Waived Priority 1000@35,00 not filled.	Z	Pass	N/E



### S. SLC - Session Level Cancel

Tags: 35=CA; 1300; 1373=3; 1374=6; 378=202 Available for: PUMA Equities; Puma Derivatives

Available for: PUMA Equities; Puma Derivatives							
Step	Description	Expected result	Req	Stat	us		
S.1	Client: Send 5 BUY orders, validity DAY  Client: Send mass orders cancellation (35=CA)	Orders will be canceled, messages 35=BZ and Execution Report from cancellation will be received.	N	Pass	N/E		
S.2	Client: Send 5 SELL orders, validity DAY  Client: Send mass orders cancellation (35=CA)	Orders will be canceled, messages 35=BZ and Execution Report from cancellation will be received.	Ν	Pass	N/E		
S.3	Only Equities  Client: Send 5 Orders, validity MOC  Client: Send mass orders cancellation (35=CA)	Orders will be canceled, messages 35=BZ and Execution Report from cancellation will be received.	Ν	Pass	N/E		
S.4	Only Equities  Trading Certification: Changes the instrument state to Reserved  Client: Send 5 Orders, validity MOA  Client: Send mass orders cancellation (35=CA)	Orders will be canceled, messages 35=BZ and Execution Report from cancellation will be received.	N	Pass	N/E		
<b>S</b> .5	Only Equities  Trading Certification: Changes the instrument state to Reserved  Client: Send 5 BUY Orders, validity MOA  Client: Send 5 SELL Orders, validity MOA  Client: Send mass orders cancellation (35=CA)	Orders will not be canceled, message 35=BZ will be received.	N	Pass	N/E		
S.6	Only Equities  Client: Send 5 Orders, validity GTC  Client: Send mass orders cancellation (35=CA)	Orders will not be canceled, message 35=BZ will be received.	Ν	Pass	N/E		
S.7	Only Equities  Client: Send 5 Orders, validity GTD  Client: Send mass orders cancellation (35=CA)	Orders will not be canceled, message 35=BZ will be received.	Z	Pass	N/E		
S.8	Client: Send 5 Orders, validity DAY Client: Send mass orders cancellation (35=CA) with Market Segment ID incorrect (tag 1300)	Orders will not be canceled, message 35=BZ will be received.	N	Pass	N/E		



Client: Send 5 Orders, validity DAY  Client: Send 5 Orders, validity DAY for a different Market Segment ID from the previous step.  S.9  Client: Send mass orders cancellation (35=CA) with bot Market Segment ID from the previous steps (tag 1300)	Orders will be canceled, messages 35=BZ and Execution Report from cancellation will	N	Pass	N/E
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#### T. OMC - Order Cancel During an Auction Tags: 35=F; 378=203 Available for: PUMA Equities; Puma Derivatives Step Description Expected result Req Status Configuration of the auction Ν Pass N/E TRADING CERTIFICATION: Change the Instrument Auction is configured to the instrument T.1 state to Pre-Open (Reserved) Cancellation of offer participating in the theoretical opening price During Neutral Phase without tag 378=203 Client: Send buy limit order, DAY Buy order is accepted 100@20.00 T.2 Cancellation of buy order is accepted Ν Pass N/E TRADING CERTIFICATION: Send sell limit order, DAY 100@20.00 Client: Send the cancellation of the buy limit day order Do not send the tag 378 (ExecRestatementReason) Cancellation of offer not participating in the theoretical opening price During Neutral Phase without tag 378=203 Client: Send buy limit order, DAY 100@20,00 Buy order is accepted T.3 TRADING CERTIFICATION: Send buy limit order, DAY Cancellation of buy order is accepted 100@21.00 N/E Ν Pass TRADING CERTIFICATION: Send sell limit order, DAY 100@21,00 Client: Send the cancellation of the buy limit day order Do not send the tag 378 (ExecRestatementReason) Cancellation of offer participating in the theoretical opening price During Neutral Phase with tag 378=203 Buy order is accepted Client: Send buy limit order, DAY 100@20,00 Cancellation of buy order is accepted and the tag 378 (ExecRestatementReason) = 203 T.4 TRADING CERTIFICATION: Send sell limit order, DAY (Cancel order due to Operational Error) is Ν Pass N/E received in the cancellantion's Execution 100@20.00 Report Client: Send the cancellation of the buy limit day order Send the tag 378 (ExecRestatementReason) = 203 Cancel order due to Operational Error) Cancellation of offer participating in the theoretical opening price During Neutral Phase with the tag 378 equal to a value that does not exist in the dictionary Client: Send buy limit order, DAY Buy order is accepted T.5 100@20,00 Cancellation of buy order is rejected N/E Ν Pass TRADING CERTIFICATION: Send sell limit order, DAY 100@20,00 Client: Send the cancellation of the buy limit day order Send the tag 378 (ExecRestatementReason)



	Concellation of affer westicinating in the through	Ţ			
	Cancellation of offer participating in the theoretical opening price				
T.6	During Neutral Phase with tag 378=203  Trading Certification: Send the cancellation of buy limit order, DAY - Informing operational error	Cancellation of buy order is accepted and the tag 378 (ExecRestatementReason) = 203 (Cancel order due to Operational Error) is received in the cancellantion's Execution Report	Ν	Pass	N/E
	Cancellation of offer participating in the theoretical opening price, with the Firmsoft (B3's system)				
	During Neutral Phase				
T.7	Client: Send buy limit order, DAY - 100@20,00	Buy order is accepted  Cancellation of buy order is accepted and the			
	TRADING CERTIFICATION: Send sell limit order, DAY - 100@20,00	tag 378 (ExecRestatementReason) = 205 (Cancel from Firmsoft due to Operational Error) is received in the cancellantion's Execution Report	С	Pass	N/E
	TRADING CERTIFICATION: Send the cancellation of buy day limit order with the Firmsoft				
	Cancellation of offer participating in the theoretical opening price				
	During Error Phase without tag 378=203				
T.8	Client: Send buy limit order, DAY - 100@20,00	Buy order is accepted			
	TRADING CERTIFICATION: Send sell limit order, DAY - 100@20,00	Cancellation of buy order is rejected	N	Pass	N/E
	Client: Send the cancellation of the buy limit day order - Do not send the tag 378 (ExecRestatementReason)				
	Cancellation of offer participating in the theoretical opening price				
	During Error Phase with tag 378=203				
T.9	Trading Certification: Send the cancellation of buy limit order, DAY - Informing operational error	Cancellation of buy order is accepted and the tag 378 (ExecRestatementReason) = 204 (Cancel order due to Operational Error) is received in the cancellantion's Execution Report	N	Pass	N/E
	Cancellation of offer not participating in the theoretical opening price				
	During Error Phase without tag 378=203				
	Client: Send buy limit order, DAY - 100@20,00	Buy order is accepted			
T.10	TRADING CERTIFICATION: Send buy limit order, DAY - 100@21,00	Cancellation of buy order is accepted	N	Pass	N/E
	TRADING CERTIFICATION: Send sell limit order, DAY - 100@21,00				
	Client: Send the cancellation of the buy limit day order - Do not send the tag 378 (ExecRestatementReason)				



	Cancellation of offer participating in the theoretical opening price				
	During Error Phase with the tag 378 equal to a value that exists in the dictionary and different than 203				
T.11	Client: Send buy limit order, DAY - 100@20,00	Buy order is accepted			N/5
	TRADING CERTIFICATION: Send sell limit order, DAY 100@20,00	Cancellation of buy order is rejected	N	Pass	N/E
	Client: Send the cancellation of the buy limit day order - Send the tag 378 (ExecRestatementReason)				
	Cancellation of offer participating in the theoretical opening price				
	During Error Phase with the tag 378=203				
T 10	Client: Send buy limit order, DAY - 100@20,00	Buy order is accepted  Cancellation of buy order is accepted and the			
T.12	TRADING CERTIFICATION: Send sell limit order, DAY - 100@20,00	tag 378 (ExecRestatementReason) = 204 (Order cancelled due to Operational Error) is received in the cancellantion's Execution Report	N	Pass	N/E
	Client: Send the cancellation of the buy limit day order - Send the tag 378 (ExecRestatementReason) = 203 (Cancel order due to Operational Error)				
	Cancellation of offer not participating in the theoretical opening price				
	During Error Phase with the tag 378=203				
	Client: Send buy limit order, DAY - 100@20,00	Buy order is accepted			
T.13	TRADING CERTIFICATION: Send buy limit order, DAY 100@21,00	Cancellation of buy order is accepted and the tag 378 (ExecRestatementReason) = 203 (Cancel order due to Operational Error) is received in the cancellantion's Execution	N	Pass	N/E
	TRADING CERTIFICATION: Send sell limit order, DAY 100@21,00	Report			
	Client: Send the cancellation of the buy limit day order - Send the tag 378 (ExecRestatementReason) = 203 (Cancel order due to Operational Error)				
	Cancellation of offer participating in the theoretical opening price, with the Firmsoft (B3's system)				
	During Error Phase	Buy order is accepted			
T.14	Client: Send buy limit order, DAY - 100@20,00	Cancellation of buy order is accepted and the tag 378 (ExecRestatementReason) = 206 (Order cancelled via Firmsoft due to	С	Pass	N/E
	TRADING CERTIFICATION: Send sell limit order, DAY 100@20,00	Operational Error) is received in the cancellantion's Execution Report	-	1 433	. —
	TRADING CERTIFICATION: Send the cancellation of buy day limit order with the Firmsoft				



## U. EDS – Exchange Defined Strategies

Tags: 442=2; 442=3; 378=206; 378=8

	Availab	e for: Puma Derivatives			
Step	Description	Expected result	Req	Stat	us
U.1	Trading Certification: Send buy limit order, DAY - 10@10,00	Buy order is accepted	N	Pass	N/E
U.2	Client: Send sell limit order, DAY - 10@10,00	Sell order is accepted  Receivement of trade's Execution Report in the sell side for the EDS instrument, validating the tag 442 = 3  Receivement of 2 trade's Execution Reports, in the buy side for one of the legs and another in the sell side for the other leg, validating the tag 442 = 2	N	Pass	N/E
U.3	Trading Certification: Send the cancellation of the generated trade	Receivement of 3 cancellation's Execution Reports, for the EDS instrument and for each leg, validating the tags 442 = 3 (EDS), 442=2 (Legs) and 150=H	N	Pass	N/E
U.4	Client: Send buy limit order, DAY - 10@10,00  Client: Send modification of the buy limit order, DAY - 10@11,00	Buy order is accepted  Receivement of modification's Execution Report confirming the modification	N	Pass	N/E
U.5	Client: Send the cancellation of the buy limit order, DAY	Receivement of buy order cancellation's Execution Report.	N	Pass	N/E
U.6	Client: Send cross limit order, DAY (35=s)	Cross order is accepted  Receivement of Execution Reports confirming the buy and sell orders, validating the tag 548  Receivement of trade's Execution Reports, in buy and sell sides for the EDS instrument and for each leg, validating the tags 442 = 3 (EDS) and 442 = 2 (Legs)	N	Pass	N/E
U.7	Client: Send buy limit order, DAY - 10@10,00  Trading Certification: Send the cancellation of buy limit order, DAY through the Firmsoft (B3's system)	Buy order is accepted  Receivement of buy order cancellation's  Execution Report, validating the tag 378 = 105	С	Pass	N/E
U.8	Client: Send buy limit order, DAY - 10@10,00  Trading Certification: Send the cancellation of buy limit order, DAY	Buy order is accepted  Receivement of buy order cancellation's Execution Report, validating the tag 378 = 8	N	Pass	N/E



#### V. Midpoint Offers

Tags: 35=D; 40=P; 1094=2; 35487=3; 1115=E

Available for: PUMA Equities; PUMA Derivatives.

Access model: DMA and Desk trader Step Description Expected result Req Status Client: Send buy Midpoint offer, DAY 10000@20,00 No trade will be generated, since there is no V.1.1 TRADING CERTIFICATION: Send sell Midpoint offer, Midpoint calculated (Central book empty) С Pass N/E DAY 10000@20,00 Client: Send buy limit order, DAY 100@19,50 Midpoint trade will be generated with orders С **Pass** N/E V.1.2 from step 'V1.1' TRADING CERTIFICATION: Send sell limit order, DAY 100@20,50 Midpoint offer will be rejected, as it is below Client: Send buy Midpoint offer, DAY the minimum quantity defined for Midpoint С **Pass** N/E V.1.3 100@20 Client: Send buy Midpoint offer, DAY 10000@19.00 Both orders will be accepted, but no trade is С **Pass** N/E V.1.4 TRADING CERTIFICATION: Send sell Midpoint order, generated. DAY 10000@20,00 Client: Send price modification of the order sent on step 'V.1.4' V.1.5 С N/E Midpoint trade is generated. Pass Book price: 10000@20,00 Client: Send buy Midpoint order, DAY Partial fill – trade generated 20000@20,00 С Pass N/E V.1.6 Orders on Midpoint book: TRADING CERTIFICATION: Send sell Midpoint offer, Buy: 10000@20,00 10000@20,00 Order is cancelled С **Pass** N/E Client: Send cancellation of the pending Midpoint order V.1.7 Client: Send buy Midpoint offer, DAY, with tag 35487 =3 No trade is generated, since the client sent 10000@20.00 С **Pass** N/E V.1.8 the order for the Broker Exclusive Book Trading Certificaion: Send sell Midpoint offer, DAY 10000@20.00 Client: Send sell Midpoint offer, DAY, with tag 35487=3 with a different account from the one sent on step 'V.1.8' V.1.9 С N/E Midpoint trade is generated Pass 10000@20,00 Trading Certification: Send trade Cancellations V.1.10 Cancellation of previous trades С Pass N/F Client: Logoff from the session С V.1.11 ogout message 35=5 **Pass** N/E



**X. Mass Cancel**Tags: 35=CA; 1300;1151; 55;35505;54 378=202; 378=207

Available for: PUMA Equities; Puma derivatives; Access: DMA and Desk trader

Available for: PUMA Equities; Puma derivatives; Access: DMA and Desk trader							
Step	Description	Expected result	Req		Status		
X.1	Customer: Send 5 buy offers, DAY, for a single instrument.  Customer: Send the mass cancelo f the offers (35=CA), indicating Only MarketSegmentId (1300) of the preivous instrument.	The offers will be canceled, message 35=BZ and Execution Report of the cancellation are received.	С	Pass	N/E		
X.2	Customer: Send 5 Sell orders, DAY, for two instruments from the same group and for one instrument of a different group.  Customer: Send mass cancel of the offers (35=CA), indicating the group of the previous two instruments (tag 1151).	The offers will be canceled for both instruments.  Message 35=BZ and Execution Report of the cancellations are received.	С	Pass	N/E		
X.3	Customer: Send 5 buy offers, DAY, for two instruments of the same group.  Customer: Send Mass Cancelo f the offers (35=CA) indicating Only one of the previous instruments (tag 55).	Only the offers of the indicated instrument will be cancelled. Message 35=BZ and Execution Report of the cancellations are received.	С	Pass	N/E		
X.4	Customer: Send 5 buy offers, DAY, with tag 35505 (OrdTagID).  Customer: Send 5 buy offers, DAY, without the tag 35502 (OrdTagID).  Customer: Send mass cancel of the offers (35=CA), indicating on OrdTagID the value filled on the first 5 previous buy orders.	Only the buy orders with OrdTagID will be cancelled. Message 35=BZ and Execution Report of the cancellations are received.	С	Pass	N/E		
X.5	Customer: Send 5 buy orders, DAY.  Customer: Send 5 sell orders, DAY.  Customer: Send mass cancel of the offers (35-CA), indicating the buy side (54=1).	The offers will be canceled. Message 35=BZ and execution report of the cancellations are received.	С	Pass	N/E		
X.6	Customer: Send 5 buy orders, DAY.  Customer: Send 5 sell orders, DAY.  Customer: Send mass cancel of the offers (35=CA), indicating the sell side (54=2).	The offers will be canceled. Message 35=BZ and Execution reports of the cancellations are received.	С	Pass	N/E		
X.7	Only Equities  Customer: Send 5 orders MOC.  Customer: Send Mass cancel of the offers (35=CA), indicating Only the MarketSegmentID (1300) of the previous instrument.	The offers are canceled, message 35=BZ and Execution Report of the cancellations are received.	С	Pass	N/E		
X.8	Only Equities  Trading Certification: Change the state of an instrument to Reserved.  Customer: Send 5 buy orders, MOA.	The offers will be canceled, message 35=BZ and Execution Reports of the cancellations are received.	С	Pass	N/E		



	Customer: Send mass cancelo f the offers (35=CA).				
X.9	Only Equities  Trading Certification: Change the state of an instrument to Reserved.  Customer: Send 5 buy orders, MOA  Customer: Send 5 sell orders, MOA.  Customer: Send mass cancel (35=CA), indicating operational error (378=207).	The offers will be canceled, message 35=BZ and Execution Report are received.	С	Pass	N/E
X.10	Only Equities  Customer: Send 5 offers, GTC.  Customer: Send mass cancel of the offers (35=CA).	The offers will not be canceled, message 35=BZ received.	С	Pass	N/E
X.11	Only Equities  Customer: Send 5 offers, GTD.  Customer: Send mass cancel of the offers (35=CA).	The offers will not be canceled, message 35=BZ received.	С	Pass	N/E
X.12	Customer: Send 5 offers, DAY.  Customer: Send mass cancelo f the offers (35=CA) with MarketSegmentID incorrect (tag 1300).	The offers will not be canceled, message 35=BZ received.	С	Pass	N/E
X.13	Customer: Send 5 offers, DAY.  Customer: send 5 offers, DAY, for a diferente Market Segment ID of the previous step.  Customer: Send mass cancelo f the offers (35=CA) stating both Market Segment IDs (tag 1300) previously sent.	The offers will be canceled, message 35=BZ and Execution Reports of the cancelation are received.	С	Pass	N/E