



BRASIL  
BOLSA  
BALCÃO

# Binary EntryPoint Order Routing

## Certification Script

Versão: 1.4

Last Modification: 10/28/2024

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## Revision History

Data	Versão	Description	Author
May 26, 2023	1.0	- Initial version	EHTI RC
January 09, 2024	1.2	- New Steps on scenario M. Mass Cancel	EHTI
Ocober 28, 2024	1.4	- New scenario Q. Implied Orders	EHTI

## 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).EntryPoint Simple Binary Encoding (SBE) in version 1.0 Little Endian based on FIXP.

FIXP é technical specification for an electronic communication of high-performance trade-related message.

It is an open standard managed by members of. <https://www.fixtrading.org/standards/fixp-online>

This outlines the certification process to route orders through B3 Binary 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](mailto: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.

### Pré-requirements

All FIX messages should follow the specification in " BinaryEntryPoint-MessageReference-6.4.2-enUS " e no " BinaryEntryPoint-MessageSpecificationGuidelines" that are available on B3's clients website at: [https://Customers.b3.com.br/pt\\_br/roadmap/sobre/atualizacao-de-gateway-de-negociacao-binario.htm](https://Customers.b3.com.br/pt_br/roadmap/sobre/atualizacao-de-gateway-de-negociacao-binario.htm)

### 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 Frequency Trader
RLP	Retail Liquidity Provider
RLT	Retail Liquidity Taker

A1.Negotiate/Establish Available for: PUMA Equities; PUMA Derivatives					
Step	Description	Expected result	Req	Status	
A1.1	Customer: Send Negotiate with wrong password (Credentials)	Receive a NegotiateReject with Logon reject message	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
A1.2	Customer: Send Negotiate	Receive NegotiateResponse	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
A1.3	Customer: Send Establish	Receive EstablishAck	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
A1.3	Trading Certification: Modify the session sequence to a greater value sequencial da sessão para that the one sent by Customer	Receive EstablishReject message, informing the sequential sent was too low than expected. Receive the informed value by Trading Certification	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

A2. Sequence (Heartbeat)					
Step	Description	Expected result	Req	Status	
A2.1	Customer: Send Sequence	Receive Sequence	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

A3. Terminate					
Step	Description	Expected result	Req	Status	
A3.1	Customer: Send Terminate	Receive Terminate	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

A4. Retransmit Request Available for: Equities and Derivatives					
Step	Description	Expected result	Req	Status	
A4.1	<b>TRADING CERTIFICATION: Send 100 messages.</b> <b>Customer: Send RetransmitRequest of first 100 messages fromSeqNum)</b>	Receive a Retransmission Customer: Confirm that o SeqNum da primeira e da última mensagem	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
A4.2	<b>Customer disconnects the session</b> <b>TRADING CERTIFICATION: Send 100 messages.</b> <b>Customer: Send Resend Request of 100 first messages (fromSeqNum)</b>	Receive a Retransmission Customer: Confirmation of SeqNum of first and last message.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
A4.3	<b>TRADING CERTIFICATION: Send 100 messages.</b> <b>Customer: Receive messages</b> <b>Customer: disconnect the session</b> <b>TRADING CERTIFICATION: Send 100 messages.</b> <b>Customer: Reconecta a sessão</b> <b>Customer: Send RetransmitRequest from remaining messages (fromSeqNum)</b>	Receive messages Receive only the remaining messages (the SeqNum from last received Message must be equal to SeqNum from last generated messaged).	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### B1. Simple LIMIT Orders with validity DAY

SimpleNewOrder  
Order Type "2", TimeInForce "0"

Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
B1.1	Customer: Send simple buy limit order, DAY • 100@20,00  TRADING CERTIFICATION: Send simple sell limit order, DAY • 100@20,00	Order filled - Trade	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.2	Customer: Send simple 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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.3	Customer: Modify pending buy order • From: 100@20,00 • Modify to: 300@21,00	Modify pending order on book  Orders on book: • Buy 200@21,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.4	TRADING CERTIFICATION: Send Sell limit order, DAY • 100@21,00	Modified order partial filled - Trade  Orders on book: • Buy 100@21,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.5	Customer: Send Cancel pending order • Quantity book: 100@21,00	Cancel pending order.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.6	TRADING CERTIFICATION: Send buy limit order, DAY • 200@20,00  Customer: Send Sell limit order, DAY • 100@21,00	Orders on book: • Buy 200@20,00 • Sell 100@21,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.7	Customer: Send modification of pending sell order, • De: 100@21,00 • Modify to: 300@20,00	Modified order partial filled - Trade  Orders on book: • Sell 100@20,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.8	Customer: Logout connection with the Exchange	Receive Terminate message logout.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.9	TRADING CERTIFICATION: Send cancelamento de ordem de Sell simples LIMIT, DAY	Cancel pending order	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

B1.10	Customer: Send RetransmitRequest message	Orders that were not sent, should not be transmitted to Exchange. Execution Report messages are retransmitted.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B1.11	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

## B2. LIMIT Orders with validity IOC/FAK

NewOrderSingle; OrdType "2"; TimeInForce "3"  
Available for: PUMA Equities; PUMA Derivatives; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
B2.1	Customer: Send Buy LIMIT order, IOC/FAK • 100@20,00	Immediate Cancel order	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B2.2	TRADING CERTIFICATION: Send LIMIT sell order, DAY • 100@20,00  Customer: Send Buy LIMIT order, IOC/FAK • 200@20,00	Order partial filled.  • Trade.  Pending canceled quantity:  • Buy 100@20,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B2.3	Customer: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send modification of buy order with validity IOC/FAK	Execution on modified order  • Canceled Order	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B2.4	TRADING CERTIFICATION: Send Buy limit order, DAY • 200@20,00  Customer: Send Sell limit order, IOC/FAK • 100@20,00	Order filled.  • Trade.  Pending quantity  • Buy 100@20,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B2.5	Customer: Send Sell LIMIT order, IOC/FAK • 100@20,00	Order filled. Trade.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B2.6	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### B3. LIMIT Orders with validity FOK

NewOrderSingle; OrdType "2"; TimeInForce "4"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
B3.1	Customer: Send Buy LIMIT order, FOK • 100@20,00	Immediate cancel order	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B3.2	TRADING CERTIFICATION: Send buy LIMIT order, DAY • 200@20,00  Customer: Send Sell LIMIT order, FOK • 200@20,00	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B3.3	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 200@20,00  Customer: Send Sell LIMIT order, FOK • 400@20,00	Immediate Cancel order	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
B3.4	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### C1. MARKET TO LIMIT orders with validity DAY

NewOrderSingle; OrdType "K"; TimeInForce "0"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
C1.1	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, DAY • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C1.2	TRADING CERTIFICATION: Send Buy Limit order, DAY • 200@20,00  Customer: Send Sell MARKET order, DAY • 100@MARKET	Order filled. Trade.  Orders on book: • Buy 100@20,00	N	Pass	N/E
C1.3	Customer: Send sell MARKET order, DAY • 200@MARKET	Order partial filled. Trade  Orders on book: • Sell 100@20,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C1.4	Customer: Send Cancel pending order • 100@20,00	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C1.5	TRADING CERTIFICATION: Send buy LIMIT order, DAY • 200@20,00  Customer: Send Sell LIMIT order, DAY • 100@21,00	Orders on book: • Buy 200@20,00 • Sell 100@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C1.6	Customer: Send modification on Sell LIMIT order, DAY • De: 100@21,00 • Modify to: 200@MARKET	Order modified total filled: Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C1.7	TRADING CERTIFICATION: Send Buy LIMIT Orders, DAY • 100@20,00 • 100@21,00  Customer: Send Sell MARKET orders, DAY • 200@MARKET	Order partial filled. Trade.  Orders on book: • Buy 100@20,00 • Sell 100@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

C1.8	TRADING CERTIFICATION: Send cancellation of buy and sell limit order, DAY, including Customer's order	Cancel pending order(s)	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C1.9	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

## C2. MARKET TO LIMIT orders with validity IOC/FAK

NewOrderSingle; OrdType "K"; TimeInForce "3"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
C2.1	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, IOC/FAK • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C2.2	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, IOC/FAK • 200@MARKET	Order partial filled. • Trade.  Cancel pending order	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C2.3	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell LIMIT order, DAY • 100@21,00  Customer: Send modify on sell MARKET order, IOC/FAK	Execution of modified order  Order filled - Trade	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C2.4	TRADING CERTIFICATION: Send Sell limit order, DAY • 100@20,00  Customer: Send Buy MARKET orders, IOC/FAK • 300@MARKET	Order partial filled. • Trade.  (qty 200) canceled order	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C2.5	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### C3. MARKET TO LIMIT Orders with validity FOK

NewOrderSingle; OrdType "K"; TimeInForce "4"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
C3.1	Customer: Send Sell MARKET order, FOK • 200@MARKET	Order rejected, once there is no counterparty.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C3.2	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, FOK • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C3.3	TRADING CERTIFICATION: Send buy limit order, DAY • 100@20,00  Customer: Send Sell MARKET orders, FOK • 200@MARKET	Accepted order then canceled.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
C3.4	TRADING CERTIFICATION: Send Trade Cancel	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### D1. LIMIT orders with validity DAY

NewOrderSingle  
Order Type "2", TimelnForce "0"

Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
D1.1	Customer: Send Buy LIMIT order, DAY • 100@20,00  TRADING CERTIFICATION: Send Sell LIMIT order, DAY • 100@20,00	Order filled - Trade	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.2	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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.3	Customer: Modify pending Buy order • From: 100@20,00 • Modify to: 300@21,00	Modify pending order on book  Orders on book: • Buy 200@21,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.4	TRADING CERTIFICATION: Send LIMIT Sell, DAY • 100@21,00	Modified order partial filled - Trade  Orders on book: • Buy 100@21,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.5	Customer: Send Cancel pending order • Quantity book: 100@21,00	Cancel pending order.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.6	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 200@20,00  Customer: Send Sell LIMIT order, DAY • 100@21,00	Orders on book: • Buy 200@20,00 • Sell 100@21,00	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.7	Customer: Send modification of 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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.8	Customer: Logout connection with the Exchange	Receive Terminate message.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.9	TRADING CERTIFICATION: Send cancellation of Sell LIMIT order, DAY	Cancel pending order	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

D1.10	Customer: Send RetransmitRequest message	The orders that were noAs Orders que não foram Senddas não devem ser transmitidas à Bolsa. Mensagens Execution Report são retransmitidas	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D1.11	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

## D2. LIMIT Orders with validity GTC

NewOrderSingle; OrdType "2"; TimeInForce "1"  
Available for: PUMA Equities; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
D2.1	Customer: Send Buy LIMIT order, GTC • 100@20,00  TRADING CERTIFICATION: Send Sell LIMIT order, DAY • 100@20,00	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D2.2	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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D2.3	Customer: Send modification of pending buy order • De: 100@20,00 • Modify to: 300@21,00	Modification of pending order on book  Orders on book: • Buy 200@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D2.4	TRADING CERTIFICATION: Send Sell LIMIT order, GTC 100@21,00	Modified order partial filled Trade.  Orders on book: • Buy 100@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D2.5	Customer: Send Cancel pending order • 100@21,00	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D2.6	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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D2.7	Customer: Send modification of pending Sell order.	Modified order partial filled: Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

	<ul style="list-style-type: none"> <li>De: 100@21,00</li> <li>Modify to: 300@20,00</li> </ul>	Orders on book: <ul style="list-style-type: none"> <li>Sell 100@20,00</li> </ul>			
D2.8	TRADING CERTIFICATION: Send cancellation of Sell LIMIT order, GTC	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D2.9	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### D3. LIMIT Orders with validity IOC/FAK

NewOrderSingle; OrdType "2"; TimeInForce "3"  
Available for: PUMA Equities; PUMA Derivatives; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
D3.1	Customer: Send Buy LIMIT order Buy LIMIT order, IOC/FAK <ul style="list-style-type: none"> <li>100@20,00</li> </ul>	Immediate order cancel	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D3.2	TRADING CERTIFICATION: Send Sell LIMIT order, DAY <ul style="list-style-type: none"> <li>100@20,00</li> </ul> Customer: Send Buy LIMIT order, IOC/FAK <ul style="list-style-type: none"> <li>200@20,00</li> </ul>	Order partial filled. <ul style="list-style-type: none"> <li>Trade.</li> </ul> Pending canceled quantity <ul style="list-style-type: none"> <li>Buy 100@20,00</li> </ul>	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D3.3	Customer: Send Buy LIMIT order, DAY <ul style="list-style-type: none"> <li>100@20,00</li> </ul> Customer: Send modification of buy order with validity IOC/FAK	Modification of order executed.: <ul style="list-style-type: none"> <li>Oferta cancelada.</li> </ul>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D3.4	TRADING CERTIFICATION: Send Buy LIMIT order, DAY <ul style="list-style-type: none"> <li>200@20,00</li> </ul> Customer: Send Sell LIMIT order, IOC/FAK <ul style="list-style-type: none"> <li>100@20,00</li> </ul>	Order filled. <ul style="list-style-type: none"> <li>Trade.</li> </ul> Pending quantity : <ul style="list-style-type: none"> <li>Buy 100@20,00</li> </ul>	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D3.5	Customer: Send Sell LIMIT order, IOC/FAK <ul style="list-style-type: none"> <li>100@20,00</li> </ul>	Order filled. Trade.	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D3.6	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

#### D4. LIMIT Orders with validity GTD

NewOrderSingle; OrdType "2"; TimeInForce "6"  
Available for: PUMA Equities; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
D4.1	Customer: Send Buy LIMIT order, GTD • 100@20,00  TRADING CERTIFICATION: Send Sell LIMIT order, DAY • 100@20,00	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.2	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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.3	Customer: Send modification of pending buyl order • De: 100@20,00 • Modify to: 300@21,00	Modificação da ordem pendente on book  Orders on book: • Buy 200@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.4	TRADING CERTIFICATION: Send Sell LIMIT order, GTD • 100@21,00	Modified order partial filled: Trade.  Orders on book: • Buy 100@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.5	Customer: Send Cancel pending order • 100@21,00	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.6	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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.7	Customer: Send modification of pending sell order • De: 100@21,00 • Modify to: 300@20,00	Modified order partial filled: Trade.  Orders on book: • Sell 100@20,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.8	Customer: Send Buy LIMIT order, GTD with old date: • 100@20,00	Order rejected	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D4.9	TRADING CERTIFICATION: Send Sell LIMIT order.	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

D4.10	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
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### D5. LIMIT Orders with validity FOK

NewOrderSingle; OrdType "2"; TimeInForce "4"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
D5.1	Customer: Send Buy LIMIT order, FOK • 100@20,00	Immediate order cancel .	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D5.2	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 200@20,00  Customer: Send Sell LIMIT order, FOK • 200@20,00	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D5.3	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 200@20,00  Customer: Send Sell LIMIT order, FOK • 400@20,00	Immediate order cancel .	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
D5.4	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

## E1. MARKET TO LIMIT orders with validity DAY

NewOrderSingle; OrdType "K"; TimeInForce "0"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
E1.1	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, DAY • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E1.2	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 200@20,00  Customer: Send Sell MARKET order, DAY • 100@MARKET	Order filled. Trade.  Orders on book: • Buy 100@20,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E1.3	Customer: Send Sell MARKET order, DAY • 200@MARKET	Order partial filled. Trade  Orders on book: • Sell 100@20,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E1.4	Customer: Send Cancel pending order • 100@20,00	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E1.5	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 200@20,00  Customer: Send Sell LIMIT order, DAY • 100@21,00	Orders on book: • Buy 200@20,00 • Sell 100@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E1.6	Customer: Send modification of Sell LIMIT Order, DAY • De: 100@21,00 • Modify to: 200@MARKET	Order total filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E1.7	TRADING CERTIFICATION: Send Buy Limit Orders, DAY • 100@20,00 • 100@21,00  Customer: Send Sell MARKET order, DAY • 200@MARKET	Order partial filled. Trade.  Orders on book: • Buy 100@20,00 • Sell 100@21,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E1.8	TRADING CERTIFICATION: Send cancellation of buy and Sell LIMIT orders, DAY, including Customer's order	Cancel pending order(s)	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

E1.9	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
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## E2. Orders a MARKET LIMIT with validity GTC

NewOrderSingle; OrdType "K"; TimeInForce "2"  
Available for: PUMA Equities; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
E2.1	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, GTC  • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E2.2	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 200@20,00  Customer: Send Sell MARKET order, GTC  • 100@MARKET	Order filled. Trade.  Orders on book: Buy 100@20,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E2.3	Customer: Send Sell MARKET order, GTC  • 200@MARKET	Order partial filled.  Trade  Orders on book: • Sell 100@20,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E2.4	Customer: Send Cancel pending order  • 100@20,00	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E2.5	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	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E2.6	Customer: Send modification of Sell LIMIT Order, GTC • De: 100@21,00 • Modify to: 200@MARKET	Execução total da ordem modificada: Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E2.7	TRADING CERTIFICATION: Send Buy Limit Orders, DAY • 100@20,00 • 100@21,00	Order partial filled.  Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

	Customer: Send Sell MARKET order, GTC • 200@MARKET	Orders on book: • Buy 100@20.00 • Sell 100@21,00			
E2.8	TRADING CERTIFICATION: Send cancellation of buy order Sell LIMIT, GTC, incluindo ordem do Customer	Cancel pending order(s).	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E2.9	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### E3. MARKET TO LIMIT with validity IOC/FAK

NewOrderSingle; OrdType "K"; TimeInForce "3"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
E3.1	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, IOC/FAK • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E3.2	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, IOC/FAK • 200@MARKET	Order partial filled. • Trade.  Cancel pending order	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E3.3	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell LIMIT order, DAY • 100@21,00  Customer: Send modificação da ordem de Sell para validade a MARKET, IOC/FAK	Execução de modificação de ordem  Order filled - Trade	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E3.4	TRADING CERTIFICATION: Send Sell LIMIT order, DAY • 100@20,00  Customer: Send order de Buy a MARKET, IOC/FAK • 300@MARKET	Order partial filled. • Trade.  Oferta (qtd 200) cancelada.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E3.5	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

#### E4. MARKET TO LIMIT with validity GTD

NewOrderSingle; OrdType "K"; TimeInForce "6"  
Available for: PUMA Equities; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
E4.1	TRADING CERTIFICATION: Send Buy LIMIT order, GTD • 100@20,00  Customer: Send Sell MARKET order, GTD  • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E4.2	TRADING CERTIFICATION: Send Buy LIMIT order, GTD • 100@20,00  Customer: Send Sell MARKET order, GTD  • 200@MARKET	Order partial filled. Trade.  Orders on book: • Sell 100@20,00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E4.3	Customer: Send modificação da ordem de Sell pendente • De: 100@20,00 • Modify to: 300@MARKET	Rejeição da modificação da ordem, once there is no counterparty.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E4.4	TRADING CERTIFICATION: Send Buy LIMIT order, GTD • 100@21,00	Order Total filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E4.5	Customer: Send Sell MARKET order, GTD • 100@MARKET	Order rejected, once there is no counterparty.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E4.6	TRADING CERTIFICATION: Send Buy LIMIT order, GTD • 100@20,00  Customer: Send Sell MARKET order, GTD  • 200@MARKET	Partial filled  Orders on book: • Sell 100@20.00	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E4.7	TRADING CERTIFICATION: Send cancellation of Sell order	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E4.8	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### E5. MARKET TO LIMIT order with validity FOK

NewOrderSingle; OrdType "K"; TimeInForce "4"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
E5.1	Customer: Send Sell MARKET order, FOK • 200@MARKET	Order rejected, once there is no counterparty.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E5.2	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, FOK • 100@MARKET	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E5.3	TRADING CERTIFICATION: Send Buy LIMIT order, DAY • 100@20,00  Customer: Send Sell MARKET order, FOK • 200@MARKET	Accepted order then canceled.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
E5.4	TRADING CERTIFICATION: Send Trade Cancel	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### F1. STOP LIMIT Orders with validity DAY

NewOrderSingle; OrdType "4"; TimeInForce "0"  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
F1.1	<p>Customer: Send STOP Buy Order, DAY</p> <ul style="list-style-type: none"> <li>100@22,10</li> <li>Stop Price: 22,00</li> </ul> <p>TRADING CERTIFICATION: Send Buy LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@22,00</li> </ul> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@22,00</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 22,00</p> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@22,00</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 22,10</p>	Order triggered and total filled	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
F1.2	<p>Customer: Send STOP Buy Order, DAY</p> <ul style="list-style-type: none"> <li>200@22,30 · Stop Price: 22,20</li> </ul> <p>TRADING CERTIFICATION: Send Buy LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@22,20</li> </ul> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@22,20</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 22,20</p> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@22,20</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 22,30</p>	<p>Order triggered and partially filled</p> <p>Orders on book:</p> <ul style="list-style-type: none"> <li>Buy 100@22,30</li> </ul>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

F1.3	Customer: Send Cancel pending order • 100@22,30	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
F1.4	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

## F2. STOP LIMIT Orders with validity GTC

NewOrderSingle; OrdType "4"; TimeInForce "1"  
Available for: PUMA Equities; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
F2.1	<p>Customer: Send STOP Buy Order, GTC</p> <ul style="list-style-type: none"> <li>100@23,10</li> <li>Stop Price: 23,00</li> </ul> <p>TRADING CERTIFICATION: Send Buy LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@23,00</li> </ul> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@23,00</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 23,00</p> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@23,00</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 23,10</p>	Order triggered and total filled	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
F2.2	<p>Customer: Send STOP Buy Order, GTC</p> <ul style="list-style-type: none"> <li>200@23,30</li> <li>Stop Price: 23,20</li> </ul> <p>TRADING CERTIFICATION: Send Buy LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@23,20</li> </ul> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@23,20</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 23,20</p> <p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p>	<p>Order triggered and partially filled</p> <p>Orders on book:</p> <ul style="list-style-type: none"> <li>Buy 100@23,30</li> </ul>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

	<ul style="list-style-type: none"> <li>100@23,20</li> </ul>				
	TRADING CERTIFICATION: Generate a trade at price 23,30				
F2.3	Customer: Send Cancel pending order <ul style="list-style-type: none"> <li>100@23,30</li> </ul>	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
F2.4	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### F3. STOP LIMIT Orders with validity GTD

NewOrderSingle; OrdType "4"; TimeInForce "6"  
Available for: PUMA Equities; Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
F3.1	Customer: Send STOP Buy Order, GTD <ul style="list-style-type: none"> <li>100@25,10 · Stop Price: 25,00</li> </ul> TRADING CERTIFICATION: Send Buy LIMIT order, DAY <ul style="list-style-type: none"> <li>100@25,00</li> </ul> TRADING CERTIFICATION: Send Sell LIMIT order, DAY <ul style="list-style-type: none"> <li>100@25,00</li> </ul> TRADING CERTIFICATION: Generate a trade at price 25,00  TRADING CERTIFICATION: Send Sell LIMIT order, DAY <ul style="list-style-type: none"> <li>100@25,00</li> </ul> TRADING CERTIFICATION: Generate a trade at price 25,10	Order triggered and total filled	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
F3.2	Customer: Send STOP Buy Order, GTD <ul style="list-style-type: none"> <li>200@25,30 · Stop Price: 25,20</li> </ul> TRADING CERTIFICATION: Send Buy LIMIT order, DAY <ul style="list-style-type: none"> <li>100@25,20</li> </ul> TRADING CERTIFICATION: Send Sell LIMIT order, DAY <ul style="list-style-type: none"> <li>100@25,20</li> </ul> TRADING CERTIFICATION: Generate a trade at price 25,20	Order triggered and partially filled  Orders on book: <ul style="list-style-type: none"> <li>Buy 100@25,30</li> </ul>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

	<p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@25,30</li> </ul> <p>TRADING CERTIFICATION: Generate a trade at price 25,30.</p>			
F3.3	<p>Customer: Send Cancel pending order</p> <ul style="list-style-type: none"> <li>100@25,30</li> </ul>	Cancel pending order.	N	<input type="checkbox"/> Pass <input type="checkbox"/> N/E
F3.4	<p>TRADING CERTIFICATION: Cancel trade(s)</p>	Trade Cancel	N	<input type="checkbox"/> Pass <input type="checkbox"/> N/E

G. Order Entry with Minimum Quantity					
MinQty Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk					
Step	Description	Expected result	Req	Status	
G.1	<p>TRADING CERTIFICATION: Send 2 Sell LIMIT orders, DAY</p> <ul style="list-style-type: none"> <li>100@20,00</li> </ul> <p>Customer: Send Buy LIMIT orders, DAY</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Quantity mínima: 100</li> </ul>	Order partial and total filled	N	<input type="checkbox"/> Pass <input type="checkbox"/> N/E	
G.2	<p>Customer: Send Buy LIMIT orders, DAY</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Quantity mínima: 100</li> </ul>	Order accepted and canceled.	N	<input type="checkbox"/> Pass <input type="checkbox"/> N/E	
G.3	<p>TRADING CERTIFICATION: Send 2 Sell LIMIT orders, DAY</p> <ul style="list-style-type: none"> <li>100@20,00</li> </ul> <p>Customer: Send Buy LIMIT orders, GTC</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Minimum quantity: 100</li> </ul>	Order partial and total filled.	N	<input type="checkbox"/> Pass <input type="checkbox"/> N/E	
G.4	<p>TRADING CERTIFICATION: Send 1 Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@20,00</li> </ul> <p>Customer: Send Buy LIMIT Orders, IOC/FAK</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Minimum Quantity: 100</li> </ul>	Order partial filled. Order Cancelled	N	<input type="checkbox"/> Pass <input type="checkbox"/> N/E	
G.5	<p>TRADING CERTIFICATION: Send 2 Sell LIMIT orders, DAY</p>	Order partial and total filled	N	<input type="checkbox"/> Pass <input type="checkbox"/> N/E	

	<ul style="list-style-type: none"> <li>100@20,00</li> </ul> <p>Customer: Send Buy LIMIT order, GTD</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Minimum quantity 100</li> </ul>			
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### H. Order entry with Disclosed quantity

MaxFloor

Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
H.1	<p>Customer: Send Buy LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Disclosed quantity: 100</li> </ul> <p>TRADING CERTIFICATION: Send 2 Sell limit Orders, DAY</p> <ul style="list-style-type: none"> <li>100@20,00</li> </ul>	Order Partial and total filled	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
H.2	<p>Customer: Send buy limit order, GTC</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Disclosed quantity: 100</li> </ul> <p>TRADING CERTIFICATION: Send 2 Sell LIMIT Orders, DAY</p> <ul style="list-style-type: none"> <li>100@20,00</li> </ul>	Order Partial and total filled	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
H.3	<p>TRADING CERTIFICATION: Send Sell LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>100@20,00</li> </ul> <p>Customer: Send Buy LIMIT order, DAY</p> <ul style="list-style-type: none"> <li>200@20,00</li> <li>Disclosed quantity: 100</li> </ul>	<p>Order partial filled.</p> <p>Order on book</p> <ul style="list-style-type: none"> <li>Buy 100@20,00</li> </ul>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
H.4	<p>TRADING CERTIFICATION: Send Cancel pending order</p>	Cancel pending order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### I. Reserved status

New Order Single; OrdType "2";  
Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status
TRADING CERTIFICATION: Change on instrument status to Pre-Open (Reserved)				
I.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	<input type="checkbox"/> Pass <input type="checkbox"/> N/E
I.2	Customer: Modify the quantity of order • 100@20,00	Modified rejected  Orders on book: • Buy 200@20,00 • Sell 200@20,00	Y	<input type="checkbox"/> Pass <input type="checkbox"/> N/E
I.3	Customer: Cancel buy order	Cancel rejected  Orders on book: • Buy 200@20,00 • Sell 200@20,00	Y	<input type="checkbox"/> Pass <input type="checkbox"/> N/E
I.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	<input type="checkbox"/> Pass <input type="checkbox"/> N/E
I.5	Customer: Modify order price (Buy: 19,00) • 200@19,50	Modified order  Orders on book: • Buy 200@20,00 • Buy 200@19,50 • Sell 200@20,00	Y	<input type="checkbox"/> Pass <input type="checkbox"/> N/E
I.6	Customer: Cancellation of Buy order (19,50)	Order Cancel  Orders on book: • Buy 200@20,00 • Sell 200@20,00	Y	<input type="checkbox"/> Pass <input type="checkbox"/> N/E
I.7	Customer: Send Buy LIMIT order, DAY	Order Entry	Y	<input type="checkbox"/> Pass

	<ul style="list-style-type: none"> <li>200@21,00</li> </ul>	Orders on book: <ul style="list-style-type: none"> <li>Buy 200@21,00</li> <li>Buy 200@20,00</li> <li>Sell 200@20,00</li> </ul>			<input type="checkbox"/> N/E
I.8	Customer: Cancel buy orders <ul style="list-style-type: none"> <li>200@20,00</li> </ul>	Order Canceled  Orders on book: <ul style="list-style-type: none"> <li>Buy 200@21,00</li> <li>Sell 200@20,00</li> </ul>	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
I.9	TRADING CERTIFICATION: Modify the instrument status to OPEN	Total execution	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
I.10	TRADING CERTIFICATION: Send Trading Cancel	Trade canceled	Y	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

J. MARKET ON CLOSE					
Available for: PUMA Equities					
Step	Description	Expected result	Req	Status	
J.1	TRADING CERTIFICATION: Send Buy LIMIT order, DAY <ul style="list-style-type: none"> <li>100@20,00</li> </ul> Customer: Send order de Sell ATC <ul style="list-style-type: none"> <li>100@MOC</li> </ul>	Order Entry  Orders on book: <ul style="list-style-type: none"> <li>Buy 100@20,00</li> <li>Sell 100@MOC</li> </ul>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
J.2	TRADING CERTIFICATION: Send Buy Buy LIMIT order, DAY <ul style="list-style-type: none"> <li>200@21,00</li> </ul> Customer: Send Sell Order ATC <ul style="list-style-type: none"> <li>200@MOC</li> </ul>	Orders.  Orders on book: <ul style="list-style-type: none"> <li>Buy 200@21,00</li> <li>Buy 100@20,00</li> <li>Sell 300@MOC</li> </ul>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
TRADING CERTIFICATION: Config Closing Call and modify instrument state to Closed.					
J.3	TRADING CERTIFICATION: Modify the instrument state to Open	Order filled ATC. Opening price: 21,00  Orders on book are canceled	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
J.4	TRADING CERTIFICATION: Send Trade Cancel	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

### K. Cross order with validity DAY

NewOrderCross, CrossedIndicator  
Available for: Puma Derivatives; PUMA Equities;  
Access Model: Trading Desk (DMA only for Equities)

Step	Description	Expected result	Req	Status	
K.1	Customer: Send cross LIMIT order, DAY with SenderLocation BVMF and valid Entering Trader • 100@20,00	Order filled. Trade.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
K.2	Customer: Send cross LIMIT order, DAY with SenderLocation BVMF and invalid Entering Trader • 100@20,00	Rejected order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
K.3	Customer: Send cross LIMIT order, DAY with SenderLocation DMA and valid Entering Trader • 100@20,00	Rejected order.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
K.4	Customer: Send order cross LIMIT, DAY with SenderLocation BVMF and valid Entering Trader and CrossedIndicator "1001" • 100@20,00	Order filled. Trade. CrossedIndicator "1001" (Structured Transaction)	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
K.5	Customer: Send cross LIMIT order, DAY with SenderLocation BVMF, valid Entering Trader and CrossedIndicator "1002" • 100@20,00	Order filled. Trade. CrossedIndicator "1002" (Operational Error)	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
K.6	Customer: Send cross LIMIT order, DAY with SenderLocation BVMF and valid Entering Trader and CrossedIndicator "1001" • 100@20,00	Order filled. Trade. CrossedIndicator "1003" (TWAP VWAP)	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
K.7	Customer: Send cross LIMIT order, DAY with SenderLocation BVMF, valid Entering Trader and CrossedIndicator "1004" • 100@20,00	Rejected order. Incorrect value of tag 2523.	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
K.8	TRADING CERTIFICATION: Cancel trade(s)	Trade Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

<b>L. OMC – Order Cancel during an Auction</b> OrderCancelRequest; ExecRestatementReason “203” Available for: PUMA Equities; Puma Derivatives					
Step	Description	Expected result	Req	Status	
L.1	<b>Auction configuration</b>  <b>Trading Certification:</b> Change the Instrument state to Pre-Open (Reserved)	Auction is configured for instrument	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.2	<b>Cancel order participating on Theoretical opening price.</b>  <b>During Neutral phase without ExecRestatementReason “203”</b>  <b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00  <b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@20,00  <b>Customer:</b> Send the cancellation of Buy LIMIT order, DAY - Do not send ExecRestatementReason	Buy order is accepted.  Buy order cancellation is accepted	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.3	<b>Cancel order not participating on Theoretical opening price.</b>  <b>During Neutral Phase without Send ExecRestatementReason “203”</b>  <b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00  <b>Trading Certification:</b> Send Buy LIMIT order, DAY - 100@21,00  <b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@21,00  <b>Customer:</b> Send a cancellation of Buy LIMIT order, DAY - Do not Send ExecRestatementReason	Buy order is accepted.  Buy order cancellation is accepted	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.4	<b>Cancel order participating on Theoretical opening price.</b>  <b>During Neutral Phase with ExecRestatementReason “203”</b>  <b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00  <b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@20,00  <b>Customer:</b> Send the cancellation of Buy LIMIT order, DAY - Send ExecRestatementReason “203”	Buy order is accepted.  Cancellation of Buy order is accepted and the (ExecRestatementReason “203” is received on Execution Report_Cancel	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.5	<b>Cancel order participating on Theoretical opening price.</b>	Buy order is accepted. Buy order cancellation is rejected	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

	<p><b>During Neutral phase with ExecRestatementReason “203” equals to a value that does not exist in the dictionary.</b></p> <p><b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@20,00</p> <p><b>Customer:</b> Send the cancellation of Buy LIMIT order, DAY - Send a tag 378 (ExecRestatementReason)</p>				
L.6	<p><b>B3 Sends the cancellation of order participating on theoretical opening price</b></p> <p><b>During Neutral Phase with ExecRestatementReason “203”</b></p> <p><b>Trading Certification:</b> Send the cancellation of Buy LIMIT order, DAY, informing Operational error.</p>	<p>Cancellation of Buy order is accepted and the <b>ExecRestatementReason “203”</b> (Cancel order due to Operational Error) is received on Execution Report_Cancel</p>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.7	<p><b>Cancellation of order participation on theoretical opening price by Firmsoft (B3 system)</b></p> <p><b>During Neutral Phase</b></p> <p><b>Customer:</b> Send LIMIT order, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send the cancellation, Buy LIMIT order, DAY, from Firmsoft</p>	<p>Buy order is accepted.</p> <p>Cancellation of Buy order is accepted and the <b>ExecRestatementReason “205”</b> (Cancel from Firmsoft due to Operational Error) is received on Execution Report_Cancel</p>	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.8	<p><b>Cancellation of order participating on theoretical opening price</b></p> <p><b>During Error phase without ExecRestatementReason “203”</b></p> <p><b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@20,00</p> <p><b>Customer:</b> Send the cancellation of Buy LIMIT order, DAY - Do not Send <b>ExecRestatementReason “203”</b></p>	<p>Buy order is accepted.</p> <p>Buy order cancellation is rejected</p>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.9	<p><b>B3 Sends the cancellation of order participating on theoretical opening price</b></p> <p><b>During Error phase without ExecRestatementReason “203”</b></p> <p><b>Trading Certification:</b> Send cancellation of Buy LIMIT order, DAY, Informing operational error.</p>	<p>Cancellation of Buy order is accepted and the <b>ExecRestatementReason “204”</b> (Cancel order due to Operational Error) is received on Execution Report_Cancel</p>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.10	<p><b>Cancellation of order not participating on theoretical opening price</b></p>	<p>Buy order is accepted.</p> <p>Buy order cancellation is accepted</p>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

	<p><b>During Error phase without ExecRestatementReason "203"</b></p> <p><b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send Buy LIMIT order, DAY - 100@21,00</p> <p><b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@21,00</p> <p><b>Customer:</b> Send the cancellation of Buy LIMIT order, DAY - Do not Send a ExecRestatementReason</p>				
L.11	<p><b>Cancellation of order participating on theoretical opening price</b></p> <p><b>During Error phase with ExecRestatementReason "203" (Use na existing value of dictionary)</b></p> <p><b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@20,00</p> <p><b>Customer:</b> Send cancellation of Buy LIMIT order, DAY - Send a (ExecRestatementReason)</p>	<p>Buy order is accepted.</p> <p>Buy order cancellation is rejected</p>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.12	<p><b>Cancellation of order participating on theoretical opening price.</b></p> <p><b>During Error phase with ExecRestatementReason "203"</b></p> <p><b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@20,00</p> <p><b>Customer:</b> Send cancellation of Buy LIMIT order, DAY - Send ExecRestatementReason "203" (Cancel order due to Operational Error)</p>	<p>Buy order is accepted.</p> <p>Cancellation of Buy order is accepted and the <b>ExecRestatementReason "204"</b> (Order canceled due to Operational Error) is received on Execution Report_Cancel</p>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
L.13	<p><b>Cancellation of order not participating on theoretical opening price.</b></p> <p><b>During Error phase with ExecRestatementReason "203"</b></p> <p><b>Customer:</b> Send Buy LIMT orderT, DAY - 100@20,00</p> <p><b>Trading Certification:</b> Send Buy LIMIT order, DAY - 100@21,00</p> <p><b>Trading Certification:</b> Send Sell LIMIT order, DAY - 100@21,00</p> <p><b>Customer:</b> Send cancellation of Buy LIMIT order, DAY <b>ExecRestatementReason "203"</b> (Cancel order due to Operational Error)</p>	<p>Buy order is accepted.</p> <p>Cancellation of Buy order is accepted and the <b>ExecRestatementReason "203"</b> (Cancel order due to Operational Error) is received on Execution Report_Cancel</p>	N	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

L.14	<b>Cancellation of order participating on theoretical opening price from Firmsoft (Sistema da B3)</b>				
	<b>During Error phase</b>	Buy order is accepted.			
	<b>Customer:</b> Send Buy LIMIT order, DAY - 100@20,00	Cancellation of Buy order is accepted and <b>ExecRestatementReason "206"</b> (Order canceled via Firmsoft due to Operational Error) is received on Execution Report_Cancel	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
	<b>Trading Certification:</b> Send oferta de Sell LIMIT, DAY - 100@20,00 <b>Trading Certification:</b> Send cancellation via Firmsoft, of Buy LIMIT order, DAY				

M. Mass Cancel					
OrderMassActionRequest					
Available for: PUMA Equities; Puma Derivatives; Acesso DMA and Trading Desk					
Step	Description	Expected result	Req	Status	
M.1	<b>Customer:</b> Send 5 Buy Orders, DAY, for a single instrument. <b>Customer:</b> Send mass cancel message OrderMassActionRequest indicating Only the buy side (Side=Buy)	The Buy orders will be canceled, OrderMassActionReport received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
M.2	<b>Customer:</b> Send 5 Sell Orders, DAY, for a single instrument. <b>Customer:</b> Send mass cancel message OrderMassActionRequest indicating Only the sell side (Side=Sell)	The Sell orders will be canceled, OrderMassActionReport received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
M.3	<b>Customer:</b> Send 5 buy orders for two instruments from the same group. <b>Customer:</b> Send mass cancel message OrderMassActionRequest, indicating only one SecurityID.	Only the orders from the selected SecurityID will be canceled. Message OrderMassActionReport and Execution Report_Cancel from canceled messages are received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
M.4	<b>Customer:</b> Send 5 buy orders, DAY, with OrdTagID <b>Customer:</b> Send 5 buy orders, DAY, without OrdTagID <b>Customer:</b> Send mass cancel message OrderMassActionRequest, indicating the OrdTagID.	Only the orders sent with the OrdTagID will be canceled. Message OrderMassActionReport and Execution Report_Cancel from canceled messages are received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
M.5	<b>Customer:</b> Send 5 orders, DAY. <b>Customer:</b> Send mass cancel message OrderMassActionRequest, indicating an incorrect SecurityID.	Orders are not canceled. OrderMassActionRepor message received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
M.6	<b>Customer:</b> Send 5 orders, DAY. <b>Customer:</b> Send mass cancel message OrderMassActionRequest, indicating an invalid SecurityID.	Orders are not canceled. OrderMassActionRepor message received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
	Client: Send 5 sell orders, validity DAY, informing an InvestorID 100 123456789				

M.7	<p>Client: Send 5 sell orders, validity DAY, informing the same InvestorID as in the previous step, for a different FIX session.</p> <p>Client: Send a mass cancellation of the orders (35=CA) informing the InverstorID (35508=100 123456789) and the Asset (6937).</p>	Sell orders will be canceled. Message 35=BZ and Execution Report of cancellations received.	C	Pass	N/E
M.8	<p>Client: Send 5 sell orders, validity DAY, informing an InvestorID 100 123456789</p> <p>Client: Send 5 sell orders, validity DAY, informing the same InvestorID as in the previous step, for a different FIX session.</p> <p>Client: Send mass cancellation of the sell o (35=CA) informing the InverstorID (35508=100 123456789) and the Symbol (55).</p>	Sell orders will be canceled. Message 35=BZ and Execution Report of cancellations received.	C	Pass	N/E
M.9	<p>Client: Send 5 sell orders, validity DAY, informing an InvestorID 100 123456789</p> <p>Customer: Send sell orders, valid DAILY, with the same InvestorID as in the previous step, for a different FIX session.</p> <p>Customer: Send mass cancellation of offers (35=CA) informing InverstorID (35508=100 123456789) and ordTagId (35505)</p>	Sell orders will be canceled. Message 35=BZ and Execution Report of cancellations received.	C	Pass	N/E
M.10	<p><b>Client:</b> Send 5 sell orders, validity DAY, informing an InvestorID 100 123456789</p> <p><b>Client:</b> Send Mass Cancellation of offers ofertas (35=CA) informing the InverstorID (35508=100 123456789) and MassActionType for Cancel and Suspend Orders (1373=4)</p> <p><b>Client:</b> Send new orders</p>	Sell orders will be canceled. Message 35=BZ and Execution Report of cancellations received. The new orders are cancelled.	C	Pass	N/E
M.11	<p><b>Client:</b> Send Mass Cancellation message with MassActionType for Release orders from suspension (1373=2)</p> <p><b>Cliente:</b> Send new orders</p>	Orders are accepted.	C	Pass	N/E

## N. Cancel on Disconnect

Available for: PUMA Equities; Access Model: DMA

Step	Description	Expected result	Req	Status	
N.1	<b>Customer:</b> Send Establish with cancelOnDisconnectType= CANCEL_ON_DISCONNECT_OR_TERMINATE and codTimeoutWindow=1000	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.2	<b>Customer:</b> Send 5 Buy Orders	Order entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.3	<b>Customer:</b> Disconnect the application via TERMINATE	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.4	<b>Customer:</b> Wait 100 miliseconds and connect via ESTABLISH	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.5	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo=last sequential and count=5	RetransmitResponse with canceled messages.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.6	<b>Customer:</b> Send an Establish with tag cancelOnDisconnectType= CANCEL_ON_DISCONNECT_OR_TERMINATE and codTimeoutWindow=1000	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.7	<b>Customer:</b> Send 5 Buy orders	Order entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.8	<b>Customer:</b> Disconnect the application via Task Manager.	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.9	<b>Customer:</b> Wait 100 miliseconds and connect via ESTABLISH	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.10	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential e count=5	RetransmitResponse with canceled messages.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.11	<b>Customer:</b> Send an Establish with tag cancelOnDisconnectType= CANCEL_ON_TERMINATE_ONLY and codTimeoutWindow=1000	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.12	<b>Customer:</b> Send 5 buy orders.	Order entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

N.13	<b>Customer:</b> Disconnect the application via TERMINATE	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.14	<b>Customer:</b> Wait 100 miliseconds and connect via ESTABLISH	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.15	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	RetransmitResponse with canceled messages.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.16	<b>Customer:</b> Send an Establish with tag cancelOnSiconnectType= CANCEL_ON_DISCONNECT_ONLY and codTimeoutWindow=1000	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.17	<b>Customer:</b> Send 5 Buy orders	Order entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.18	<b>Customer:</b> Disconnect the application via Task Manager.	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.19	<b>Customer:</b> Wait 100 miliseconds and connect via ESTABLISH	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.20	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	RetransmitResponse with canceled messages.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.21	<b>Customer:</b> Send an Establish with tag cancelOnSiconnectType= CANCEL_ON_TERMINATE_ONLY and codTimeoutWindow=1000	Session Connected	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.22	<b>Customer:</b> Send 5 Buy Orders.	Order entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.23	<b>Customer:</b> Disconnect the application via Task Manager.	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

N.24	<b>Customer:</b> Wait 100 milliseconds and connect via ESTABLISH	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.25	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.26	<b>Customer:</b> Send an Establish with cancelOnSiconnectType=CANCEL_ON_DISCONNECT_ONLY and codTimeoutWindow=1000	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.27	<b>Customer:</b> Send 5 Buy Orders.	Order Entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.28	<b>Customer:</b> Disconnect the application via TERMINATE	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.29	<b>Customer:</b> Wait 100 milliseconds and connect via ESTABLISH	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.30	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.31	<b>Customer:</b> Send an Establish with tag cancelOnSiconnectType=DO_NOT_CANCEL_ON_DISCONNECT_OR_TERMINATE and codTimeoutWindow=1000	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.32	<b>Customer:</b> Send 5 Orders de Buy.	Order Entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.33	<b>Customer:</b> Disconnect the application via TERMINATE	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

N.34	<b>Customer:</b> Wait 100 miliseconds and connect via ESTABLISH	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.35	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.36	<b>Customer:</b> Send an Establish with tag cancelOnSiconnectType=DO_NOT_CANCEL_ON_DISCONNECT_OR_TERMINATE and codTimeoutWindow=1000	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.37	<b>Customer:</b> Send 5 Buy orders.	Order Entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.38	<b>Customer:</b> Disconnect the application via Task Manager.	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.39	<b>Customer:</b> Wait 100 miliseconds and connect via ESTABLISH	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.40	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.41	<b>Customer:</b> Send an Establish with tag cancelOnSiconnectType=CANCEL_ON_DISCONNECT_OR_TERMINATE and codTimeoutWindow=10000	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.42	<b>Customer:</b> Send 5 Buy Orders.	Order entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.43	<b>Customer:</b> Disconnect the application via Task Manager.	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

N.44	<b>Customer:</b> Connects via ESTABLISH within the configured time limit.	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.45	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.46	<b>Customer:</b> Send an Establish with tag cancelOnSiconnectType=CANCEL_ON_DISCONNECT_OR_TERMINATE and codTimeoutWindow=10000	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.47	<b>Customer:</b> Send 5 Buy Orders.	Order Entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.48	<b>Customer:</b> Disconnect the session via TERMINATE	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.49	<b>Customer:</b> Connects via ESTABLISH within the configured time limit.	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.50	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.51	<b>Customer:</b> Send an Establish with tag cancelOnSiconnectType=CANCEL_ON_TERMINATE_ONLY and codTimeoutWindow=10000	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.52	<b>Customer:</b> Send 5 Buy Orders.	Order entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.53	<b>Customer:</b> disconnect the session via TERMINATE	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.54	<b>Customer:</b> Connects via ESTABLISH within the configured time limit.	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

N.55	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.56	<b>Customer:</b> Send Establish with cancelOnSiconnectType=CANCEL_ON_DISCONNECT_ONLY e codTimeoutWindow=10000	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.57	<b>Customer:</b> Send 5 Buy Orders.	Order Entry	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.58	<b>Customer:</b> Disconnect the application via Task Manager.	Disconnected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.59	<b>Customer:</b> Connects via ESTABLISH within the configured time limit.	Connected session	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
N.60	<b>Customer:</b> Resend RetransmitRequest with fromSeqNo= last sequential and count=5	No messages received.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

## O. Self Trade Prevention

Available for: PUMA Equities; Puma Derivatives Access Model: DMA and Trading Desk

Step	Description	Expected result	Req	Status	
O.1	<b>Customer:</b> Send Buy limit order, DAY 100@20,00 InvestorID=12345 selfTradePreventionInstruction=1  <b>Customer:</b> Send Sell LIMIT order, DAY 100@20,00 InvestorID=12345	Buy order is accepted. Sell order is accepted and eliminated.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
O.2	<b>Customer:</b> Send Buy limit order, DAY 100@20,00 InvestorID=12345 selfTradePreventionInstruction=2  <b>Customer:</b> Send Sell LIMIT order, DAY 100@20,00 InvestorID=12345	Buy order is accepted. Sell order is accepted. Buy order is eliminated.	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E
O.3	<b>Customer:</b> Send Buy limit order, DAY 100@20,00 InvestorID=12345 selfTradePreventionInstruction=3  <b>Customer:</b> Send Sell limit order, DAY 100@20,00 InvestorID=12345	Buy order is accepted. Sell order is accepted and then eliminated. Buy order is eliminated	C	<input type="checkbox"/> Pass	<input type="checkbox"/> N/E

P. H.A. – Main instance failover Available for: PUMA Equities; PUMA Derivatives					
Step	Description	Expected result	Req	Status	
P.1	<b>Customer:</b> Send 10 Buy limit orders, DAY • 100@20,00	Receive 10 Execution Report's	<b>S</b>	<input type="checkbox"/> <b>Pass</b>	<input type="checkbox"/> N/E
Trading Certification: Simulates main instance failover.					
P.2	<b>Customer:</b> Reconnects before the backup gateway is available	Customer: connection rejects	<b>S</b>	<input type="checkbox"/> <b>Pass</b>	<input type="checkbox"/> N/E
P.3	<b>Customer:</b> Reconnect session after the gateway is available	Customer: Connects on the session and SequenceNumber is correctly incremented	<b>S</b>	<input type="checkbox"/> <b>Pass</b>	<input type="checkbox"/> N/E
P.4	<b>Customer:</b> Send 10 Orders de Buy LIMIT, DAY 100@20,00	Customer: Receive 10 Execution Report's	<b>S</b>	<input type="checkbox"/> <b>Pass</b>	<input type="checkbox"/> N/E
P.5	<b>Customer:</b> Send logout message	Session disconnected	<b>S</b>	<input type="checkbox"/> <b>Pass</b>	<input type="checkbox"/> N/E
P.6	<b>Trading Certification:</b> Send order cancellations	Pending orders are cancelled	<b>S</b>	<input type="checkbox"/> <b>Pass</b>	<input type="checkbox"/> N/E
P.7	<b>Customer:</b> Send RetransmitRequest of all messages	Customer: Receives Retransmission.	<b>S</b>	<input type="checkbox"/> <b>Pass</b>	<input type="checkbox"/> N/E

Q. Implied orders Ratio for both legs = 1					
Step	Description	Expected result	Req	Status	
Q.1	Customer: Add one BUY order for DI1F33, quantity 5 and price 0,05.	Receives Execution Report.	N	Pass	N/E
Q.2	Trading Certification: Add one SELL order for DI1G34, quantity 20 and price 0,15	The Implied order is created on the SELL side of DIIF33G34. 5@0,10	N	Pass	N/E
Q.3	Trading Certification Modifies sent order, changing the quantity for 10	Implied order quantity remains the same. 5@0,10	N	Pass	N/E
Q.4	Costumer Modifies sent order, changing the quantity for 10	Implied order has the quantity modified. 10@0,10	N	Pass	N/E
Q.5	Customer: Add one BUY order for DIIF33G34, price 0,10 quantity 10	<p>Receives 6 Execution Report:</p> <ol style="list-style-type: none"> <li>1. New buy order in DIIF33G34;</li> <li>2. Filled buy order in DIIF33G34, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</li> <li>3. Filled buy order in DI1G34, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</li> <li>4. Filled sell order in DI1G34, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</li> <li>5. Filled buy order in DI1F33, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</li> <li>6. Filled sell order in DI1F33, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</li> </ol> <p>*All values in tag 35540 (ImpliedEventID) must be the same.</p> <p>*Implied order no longer exists in DIIF33G34 book.</p>	N	Pass	N/E
Q.6	Customer: Add one SELL order for DI1F33, quantity 10 and price 0,05.	Receives Execution Report.	N	Pass	N/E
Q.7	Trading certification: Add one BUY order for DI1G34, quantity 10 and price 0,15.	The Implied order is created on the BUY side of DIIF33G34.	N	Pass	N/E
Q.8	Customer: Add one SELL order for DI1F33, quantity 5 and price 0,10.	<p>Receives 6 Execution Report:</p> <ol style="list-style-type: none"> <li>1. New sell order in DIIF33G34;</li> <li>2. Filled sell order in</li> </ol>	N	Pass	N/E

		<p>DIIF33G34, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</p> <p>3. Filled buy order in DI1F33, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</p> <p>4. Partially Filled sell order in DI1F33, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</p> <p>5. Partially Filled buy order in DI1G34, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</p> <p>6. Filled sell order in DI1G34, with tag 1115 = 7 and tag 35540 (ImpliedEventID)</p> <p>*All values in tag 35540 (ImpliedEventID) must be the same.</p> <p>*Implied order no longer exists in DIIF33G34 book.</p>			
Q.9	Trading certification: Add one BUY order for DI1G34, quantity 10 and price 0,15.	The Implied order is created on the BUY side of DIIF33G34, 5@0,10	N	Pass	N/E
Q.10	Customer: Cancels SELL order on DI1F33	The Implied order is cancelled.	N	Pass	N/E