Contents

Risk Management Function

Cancel on Disconnect

Trading Participant

Virtual Server1

Abnormal Disconnection

Participant GW
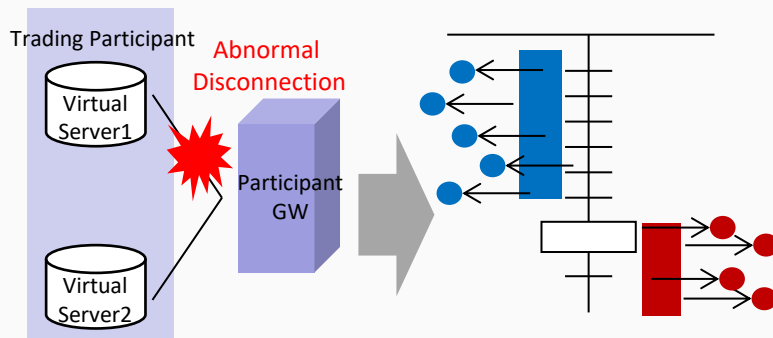
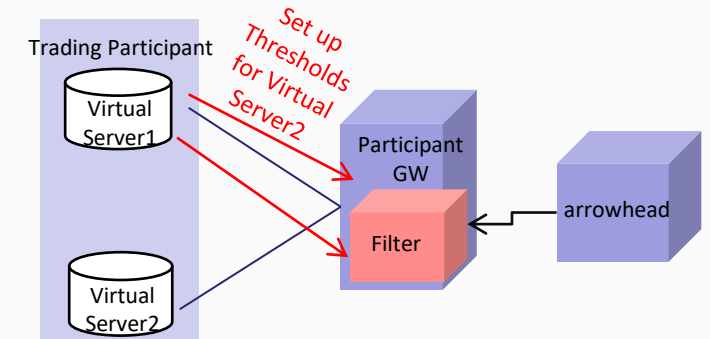Virtual Server2

Triggered by a Virtual Server disconnecting abnormally, all valid orders from the Virtual Server remaining in the Order Book are automatically cancelled.

Order Suspension/Cancellation Instruction (Kill Switch)

Trading Participant

Virtual Server1

Order Suspension/Cancellation Request to Virtual Server 2

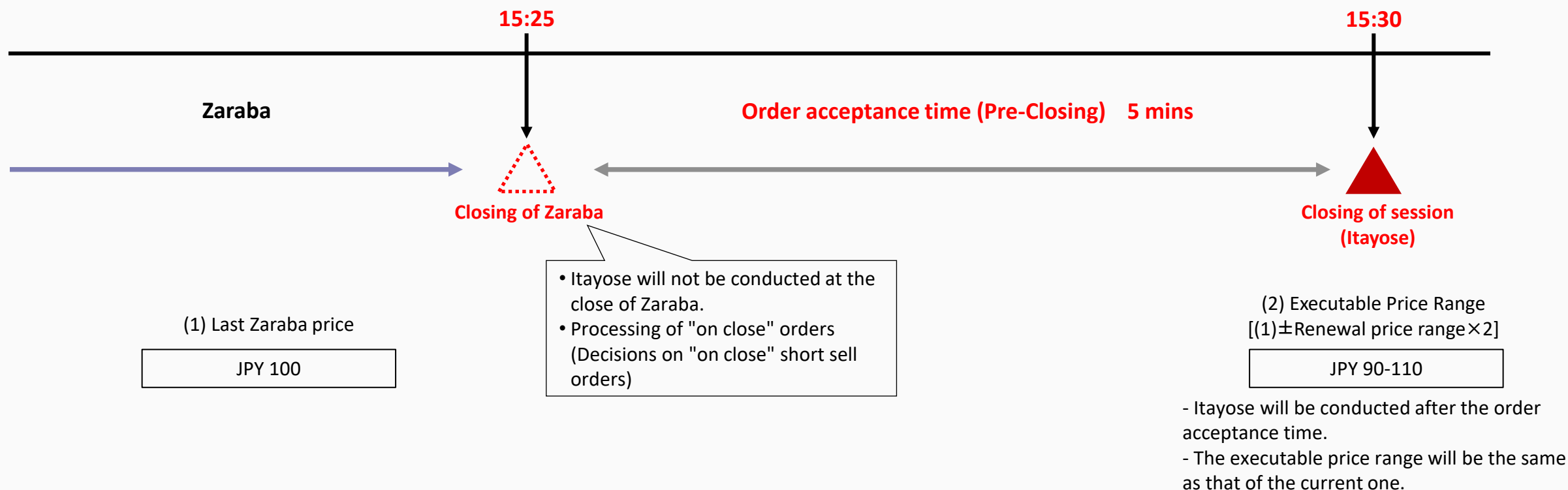Participant GW

Suspension of Order Entry
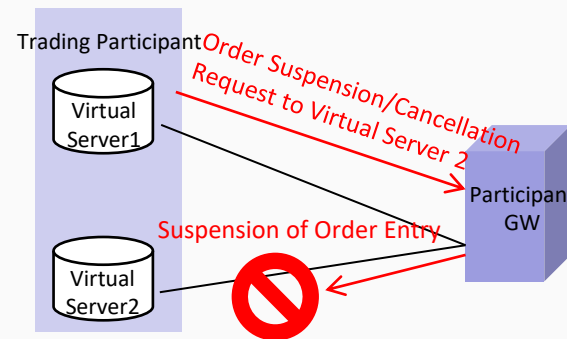
Virtual Server2

This function allows a participant to forcibly suspend order entries from a specified Virtual Server and instruct arrowhead to automatically cancel all orders from such Virtual Server remaining in the Order Book.
This function is also available on a Virtual Server Group basis.

User-Designated Hard-Limit

Trading Participant

Virtual Server1

Set up Thresholds for Virtual Server2

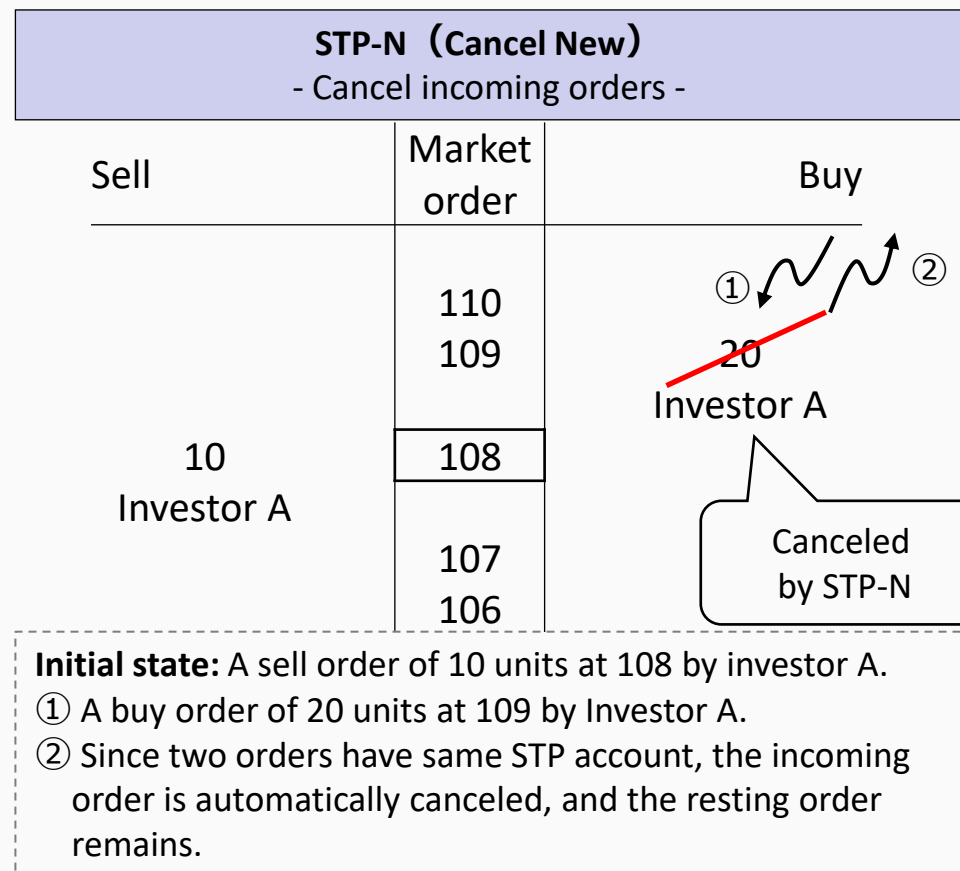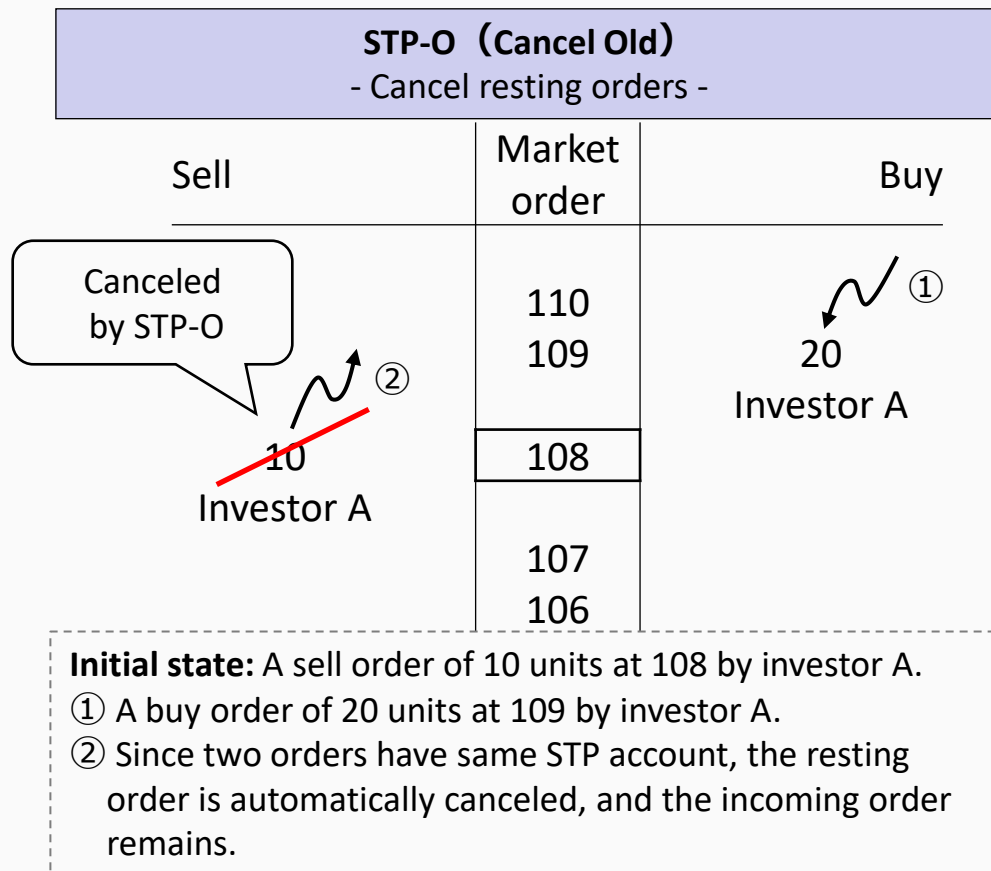Participant GW

Filter

arrowhead

Virtual Server2

A limiter function that allows participants to impose upper limits on order value and/or execution value for a certain Virtual Server.
With this function, trading participants can control the value per order, cumulative order value, and cumulative execution value (cumulative execution value can be also calculated on a Virtual Server Group basis.)

Matching Engine (1)

Closing Auction

15:25   **15:30**

Zaraba   **Order acceptance time (Pre-Closing)   5 mins**

Closing of Zaraba   **Closing of session
(Itayose)**

(1) Last Zaraba price

JPY 100

• Itayose will not be conducted at the close of Zaraba.
• Processing of "on close" orders (Decisions on "on close" short sell orders)

(2) Executable Price Range
[(1)±Renewal price range×2]

JPY 90-110

- Itayose will be conducted after the order acceptance time.
- The executable price range will be the same as that of the current one.

With this system Upgrade, Closing Auction will be introduced for auction trading (arrowhead) only in the afternoon session of the stock market, which will lead to increase foreseeability of closing price formation, as well as to conduct price formation that further reflects investor's supply and demand.

arrowhead

Self-Trade Prevention

STP-O（Cancel Old） - Cancel resting orders -	STP-N（Cancel New） - Cancel incoming orders -

Initial state: A sell order of 10 units at 108 by investor A.
① A buy order of 20 units at 109 by investor A.
② Since two orders have same STP account, the resting order is automatically canceled, and the incoming order remains.

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① A buy order of 20 units at 109 by Investor A.
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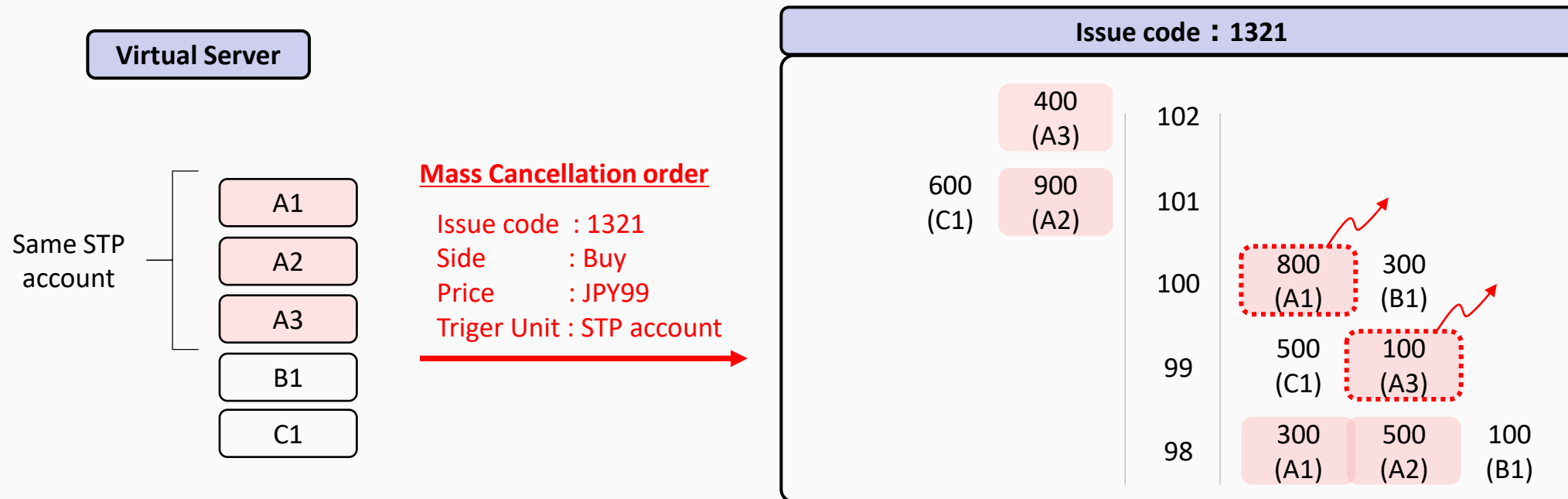
Self-Trade Prevention function prevents the execution of orders placed by the same user. arrowhead identifies the user of an order with STP account information. When placed orders are matched by users with the same STP account, STP function is triggered.

* STP is applied only to Zaraba session (excluding the execution of simultaneous orders).
* Users have to register "STP account information" to use STP. This function is assumed for use by institutional investors.

arrowhead

Mass Cancellation

Virtual Server

Same STP account
- A1
- A2
- A3
- B1
- C1

Mass Cancellation order

Issue code : 1321
Side : Buy
Price : JPY99
Triger Unit : STP account

Issue code：1321

Price			
102		400 (A3)	
101	600 (C1)	900 (A2)	
100		800 (A1)	300 (B1)
99		500 (C1)	100 (A3)
98		300 (A1)	500 (A2) 100 (B1)

Users who have virtual servers on that the STP account is configured place the mass cancellation order that specifies the issue code, side, price, and trigger unit (STP account or virtual server).

*not cancel orders below the specified price or on the opposite side (sell/buy).

*In case of specifying STP account as trigger unit, orders placed across the trading participants are cancelled.

*Mass Cancellation is assumed for use by institutional investors.

TSE Market by order(MBO)

Sell order	Price	Buy order
15	JPY 102	
5	JPY 101	
	JPY 100	10 20 10
	JPY 99	10
	JPY 98	20 5

If a buy order of 10 units is newly placed at JPY 100

Market by Order

	Symbol	Sell/Buy	Price	Quanity	OrderID
New quote	8697	Buy	JPY 100	10 units	XYZ002

Please note that the Order ID is a unique value for each issue, and the numbering system does not allow identification of trading participants or investors by the Order ID.

For TSE's market by order service, market data will be disseminated by an order. Information on a relevant order including its quantity will be disseminated as new order information. The "Order ID" will be disseminated for the purpose of linking market information with a trading participant's own orders.