# Appendix 2 – DS-OL Use Cases

# Summary

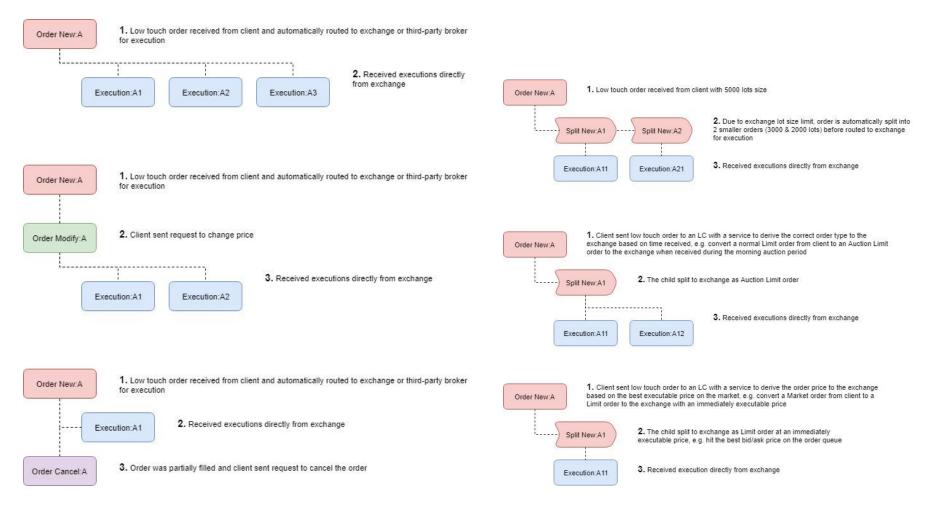
#	Use Cases	LT	HT/PT	Brief Descriptions
1	Low touch (without Algo)	$\checkmark$		Low Touch orders from client (with and without splits)
2	Low touch (with Algo)	$\checkmark$		Low Touch orders with Algo from client
3	High Touch/Program Trading		$\checkmark$	High Touch/Program Trading orders using manual fills
4	High Touch/Program Trading - Algo		$\checkmark$	High Touch/Program Trading orders using Algo for executions
5	High Touch/Program Trading - Internal Crossing		$\checkmark$	High Touch/Program Trading orders using internal cross
6	Alternative Liquidity Pool (ALP) Executions	$\checkmark$	$\checkmark$	Executions using internal Alternative Liquidity Pool (ALP)
7	Internet Trading	$\checkmark$		Retail client trading through the Internet
8	Multi-day Orders	$\checkmark$	$\checkmark$	Multi-day (GTC/GTD) orders
9	Basket Orders	$\checkmark$	$\checkmark$	Trading a basket of orders
10	Aggregated Orders		$\checkmark$	Aggregated orders executed at a HT/PT desk
11	Execution Corrections	$\checkmark$	$\checkmark$	Execution corrections (amendments and cancels)
12	Facilitation Trading		$\checkmark$	Client facilitations trade at a PT desk, including change in order capacity
13	Swap (hedging leg)	$\checkmark$	$\checkmark$	Generic example of swap orders
14	Race Conditions	$\checkmark$		Possible race condition handling client modification or cancel
15	Outage / Mass Cancel	$\checkmark$	$\checkmark$	Service outage scenario and mass cancel
16	Exceptions	$\checkmark$	$\checkmark$	Exceptions and special scenarios

Notes: 1. Event diagrams are depicted primarily to show the relationships between the events, which will not necessarily appear in this order in practice.

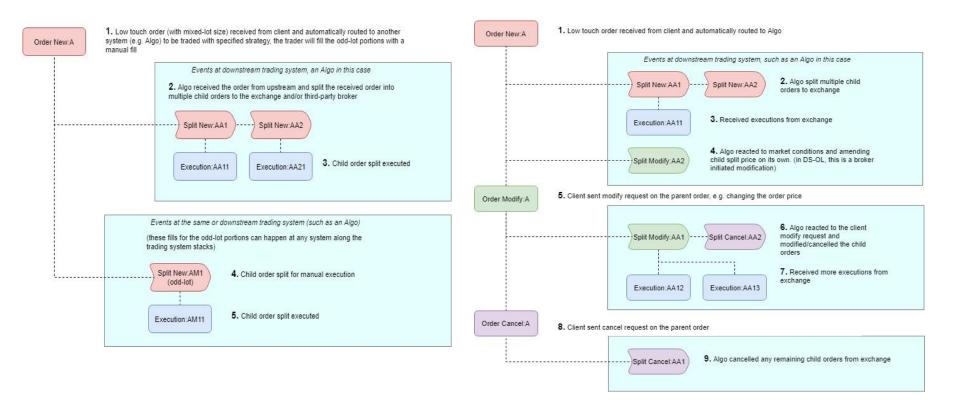
2. Event diagrams are for illustration purposes and only a minimal number of fields are shown. For a full list of fields for each event type please refer to the event definitions in the DS-OL Technical Specifications.

3. For the purpose of illustration, the order summary event is not depicted in some of the examples.

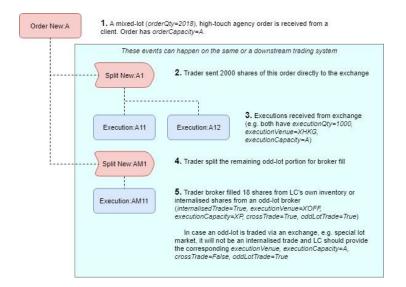
# 1. Low touch (without Algo)



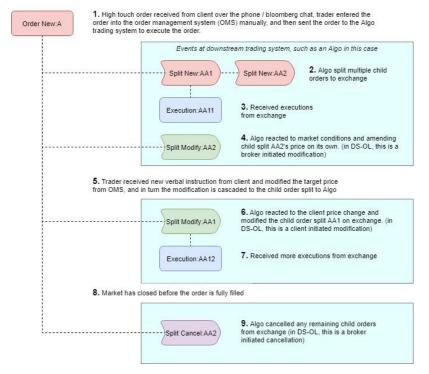
# 2. Low touch (with Algo)



## 3. High Touch / Program Trading

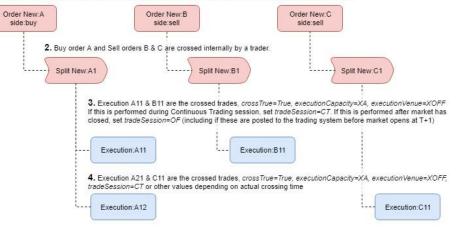


# 4. High Touch / Program Trading - Algo

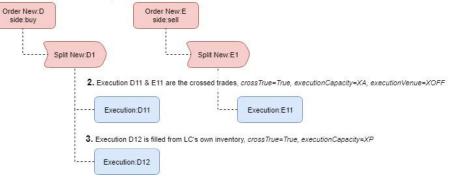


# 5. High Touch / Program Trading - Internal Crossing

1. The HT / PT desk received orders on opposite sides from different clients, and decided to cross them internally



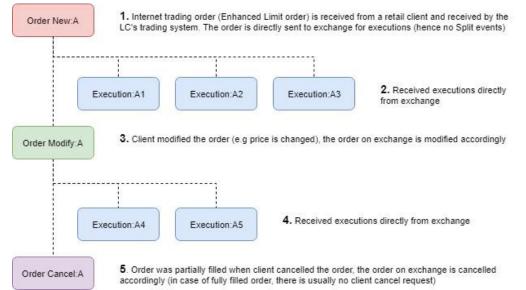
 The HT / PT desk received orders of opposite side from different clients, some are crossed with other clients and some are filled from LC's own inventory



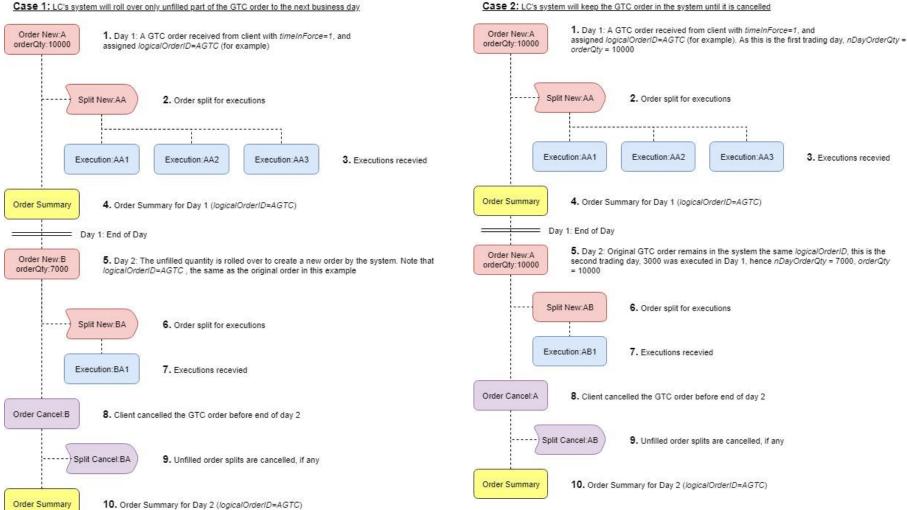
## 6. Alternative Liquidity Pool (ALP) Executions

1. Order received from a client, which has opted-in for ALP Order New:A Events at the same or downstream trading system (such as an Algo in this case) 2. Algo tried to seek some of the liquidity from LC's ALP Split New:AA1 3. Algo also split some orders to exchange Split New:AA2 Execution:AA11 4. Received execution from ALP with, crossTrade=True, executionVenue=XALP (LC-5. Algo removed the unfilled defined value in this example). liquidity from ALP and put tradeSession=CT them on the exchange instead Split Cancel:AA1 Split New: AA3 6. Received executions from SEHK with Execution:AA31 Execution:AA21 executionVenue=XHKG

### 7. Internet Trading



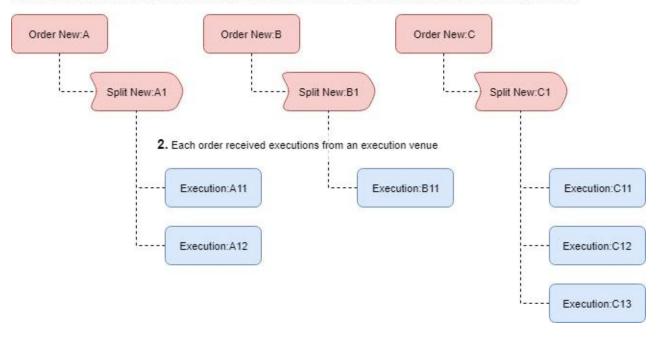
#### 8. Multi-day Orders



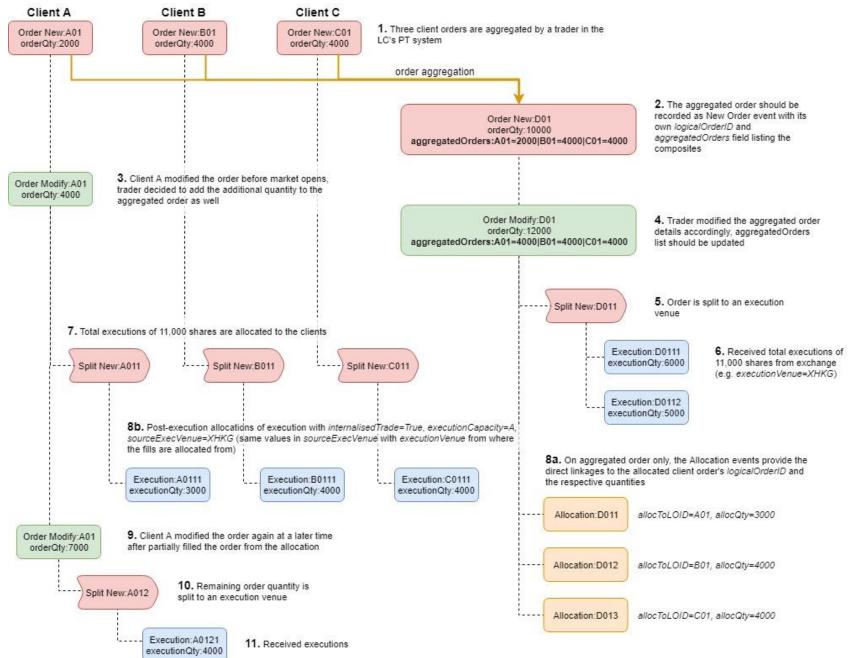
#### Case 2: LC's system will keep the GTC order in the system until it is cancelled

# 9. Basket Orders

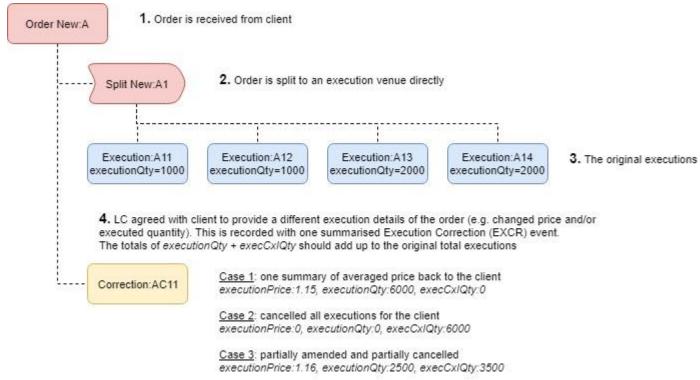
1. A basket of orders is received from a client to the PT desk. Orders can be traded in a group or individually depending on trader's decision. Collection ID (collectionID) is assigned as 'basket=BSK01' and each order has its own logicalOrderID



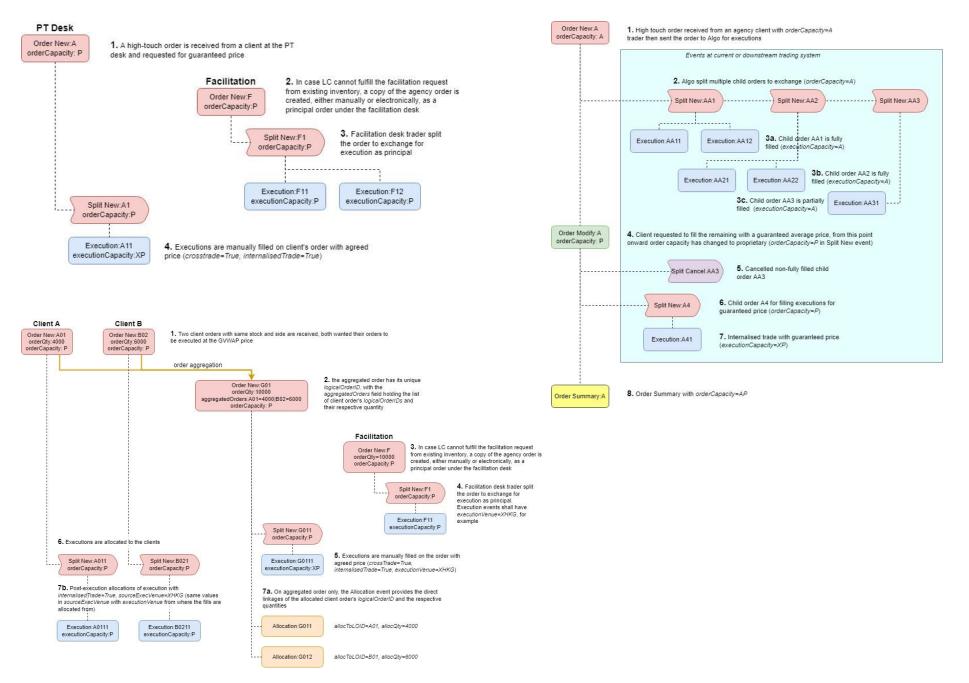
#### 10. Aggregated Orders



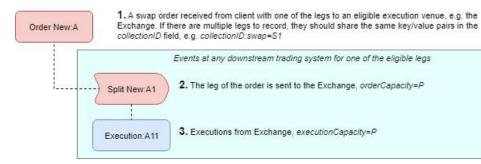
# **11. Execution Corrections**



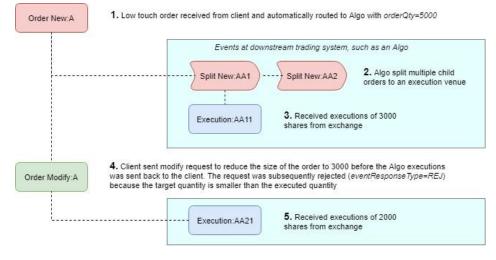
#### 12. Facilitation Trading (updated on 22 December 2022)

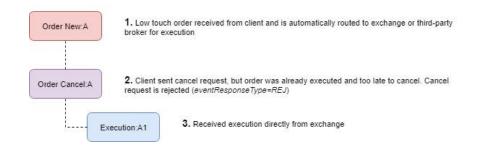


# 13. Swap (hedging leg)



# 14. Race Conditions





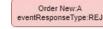
# 15. Outage / Mass Cancel



# 16. Exceptions

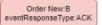
#### Rejecting new client order request

Scenario A: Client order rejected right away



1. An order was received from a client in FIX and rejected right away by the LC with eventResponseType=REJ

#### Scenario B: Client order was accepted with ACK, but eventually cancelled back to client

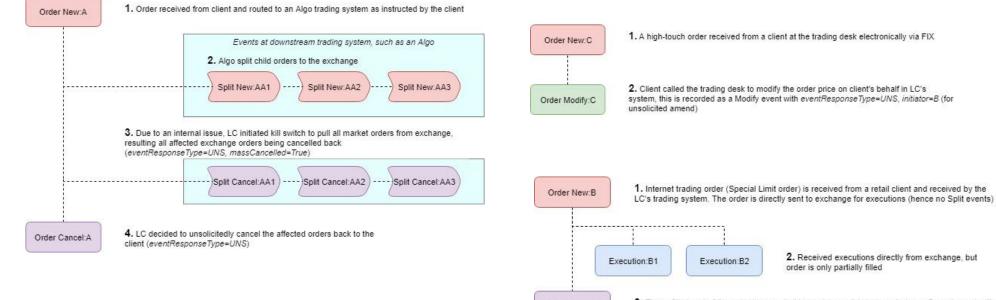


 An order was received from a client in FIX and accepted by the LC with eventResponseType=ACK Order was not immediately processed (e.g. queued to wait for market opens)

Order Cancel:B eventResponseType:UNS

Order Cancel:B

2. Later the order was released but rejected due to risk checks, LC unsolicitedly cancelled the order back to the client. This is recorded using Order Cancel event with eventResponseType=UNS



 The unfilled part of the order is cancelled by exchange, this is recorded as a Cancel event with eventResponseType=UNS (for unsolicited cancel)