



CME Front End Clearing FIXML API Allocation Management API Overview

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1.0 Introduction

This document provides an overview of CME Front End Clearing FIXML Allocation Management API, supporting functions, workflows, message flows, and interfaces to allow firms and other authorized users to allocate, claim, reverse, and sub-allocate trades.

The API is defined in FIXML using FIX 5.0 SP2 with custom CME Group extensions. Please refer to the [message specification](#) for details. Additional information on FIXML post trade messages is available at the following FIX Protocol website:

http://fixprotocol.org/documents/4487/FIX-5.0_SP2_VOL-5.pdf

1.1 Prerequisites

This document assumes that users have a basic understanding of XML and some familiarity with trade reporting models.

Refer to the FIXML Schema at <http://www.fixprotocol.org> to gain an introduction to or an enhanced understanding of FIXML functionality.

1.2 CME Clearing Contact Information

For more information please contact:

ccs@cmegroup.com or 312.207.2525

1.3 API Overview

Allocation and Claim of trades is the process by which an executing firm gives up a trade to another firm with the Clearing House acting as an intermediary between the executing firm and the claiming firm.

CME Front End Clearing provides a robust interface to give up trades to claim or carry firms and manage the allocated trades (i.e. allocations). Firms have an option to give up either a single trade or group trades and also give up trades from the group.

Executing firms can give up (allocate) trades to claim firms. Once the CME Clearing system receives a give up instruction, the system:

1. Creates a group (even if a single trade is given up).
2. Notifies the executing firm.
3. Creates a new allocation for both the executing firm and the claiming firm.
4. Sends a notification of the new allocation to both sides.

On receipt of the notification of the new allocation, the claiming firm claims or refuses the allocation, and the clearing system processes the claim or refusal, acknowledges the claim firm and notifies the executing firm of the claim/refusal. The interface also allows the claim firm to further allocate / give-up the claimed allocation to another claim firm. Either firm can request to reverse an allocation that the opposite side claimed.

Alternatively, trades can be average priced and then given-up (allocated) to claim firms. In this case, the following occurs:

1. The firm marks trades for average pricing.
2. The clearing system creates a group or updates a group as trades are added to it and notifies the executing firm.
3. The executing firm can complete a group and then allocate from the group to claim firms.

The allocation and claim is similar to the give up flow. The API provides additional interfaces to manipulate the average price groups like un-completing, deleting, etc.

The interface supports allocation reversals, pre-claim and post-claim updates to allocation, deletion of allocations, and other additional functions, which are listed below. Additionally, error cases are documented.

The interface also supports cross-exchange give ups to firms that trade on another exchange, claiming trades that are given up by firms trading on another exchange, and reversals of these transactions. This functionality is supported only for exchanges that are part of the Mutual Offset Agreement.

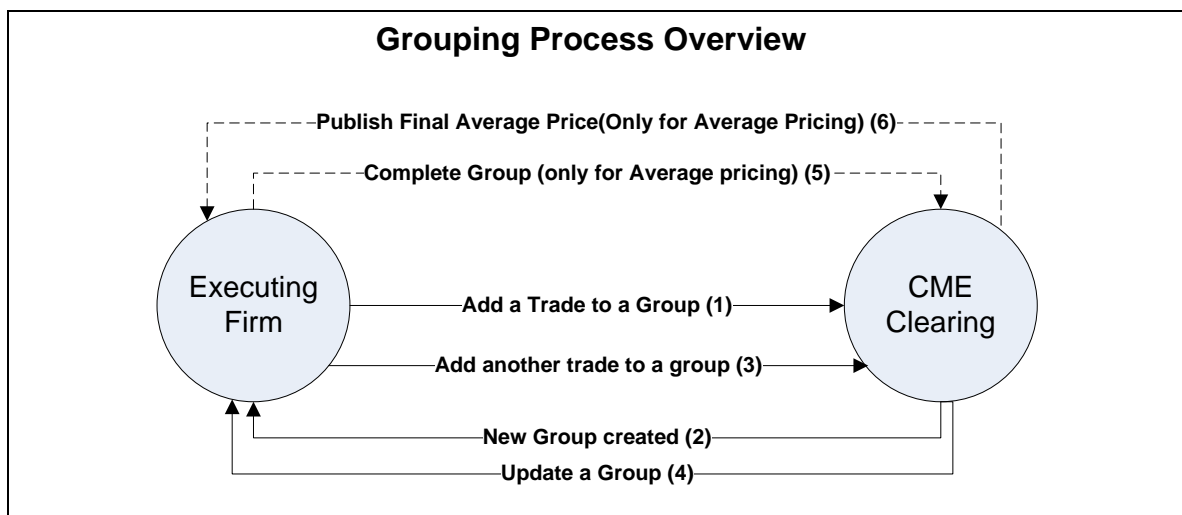
Use the CME FEC GUI to view trades throughout the allocation and claim process. Any change in trade status is communicated through the API. The API is defined in FIXML (FIX Protocol Ltd).

1.3.1 Grouping Trades

The clearing system allows firms to group / aggregate trades for the purpose of giving up (allocating) to firms. These groups are also referred to as allocation groups. The clearing system assigns trades to allocation groups using the following criteria:

- Firm and Trader
- Trade Date
- Instrument identification
- Side of Market
- Trade Price
- Customer Account
- Trade Type
- Client Order ID

Trades designated for give-up allocation are aggregated into “allocation groups” according to predefined criteria. The executing firm can choose to bypass these grouping criteria by designating that trades not be added to existing allocation groups. In this case, the clearing system will add the trade to its own new group.



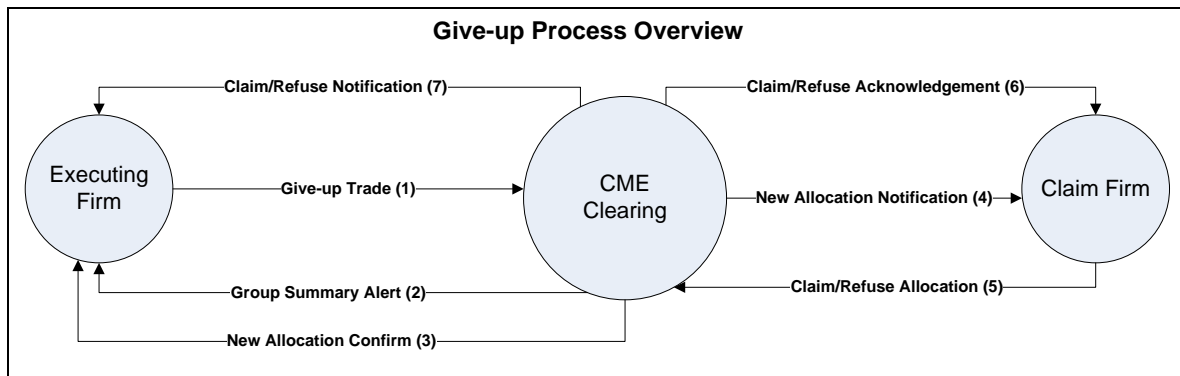
1.3.2 Give Up Trades

In this model, trades are given up at the trade price. Firms have the option to give up single trades (also referred to as single trade allocation) where each trade is associated with a unique group. Alternatively firms can group and give-up trades from the group. The clearing system will assign trades to a group based on the grouping criteria described above. Even if trades are grouped, the allocation process begins as soon as a specific claim firm and account are received by the clearing system.

Trades can be designated for allocation by submitting them with an allocation indicator. Alternatively, specific allocation information such as claiming firm, account and origin can also be appended to trades marked for allocation. The clearing system creates a group and notifies the executing firm. If a trade has just been marked for give-up, specific allocation instructions can be submitted later with the claim firm and account information by referencing the group. The new allocation is created as soon as the clearing system get specific allocation information about the claim firm and account, and both sides are notified.

The clearing system assigns a unique group ID first time a trade is added to the group. Subsequently, as trades are added to the group, the group is modified and the executing firm is notified. Each firm will also be assigned a unique allocation ID for the allocation. The firms will have to refer to the allocation by specifying the allocation ID in the messages. The executing firm also must specify the clearing assigned group ID to reference the allocation and group.

The claiming firm(s) can respond to the new allocation by either claiming or refusing the allocation by specifying the clearing supplied allocation ID. The claiming firm can also specify its own firm allocation ID while claiming the allocation, which will be preserved and echoed back on confirms, notifications, and acknowledgements. The claiming firm's response would then be communicated back to the executing firm by the CME Clearing system.



1.3.3 Average Pricing Trades

Executing firms can allocate trades at an average price instead of at a trade price. In this model, the executing firm groups trades by average price, specifying an average price group ID on the trade. Once a group is completed, the clearing system work flow is similar to the give-up work flow.

Trades marked for average pricing but not designated to an average price group will be stored in FEC as unassigned average price trades. Firms can provide an average price group ID for unassigned trades by updating individual trades via trade update messages or selecting multiple unassigned trades within the FEC user interface and assigning them to an existing or new average price group. All trades in an average price group must share the same:

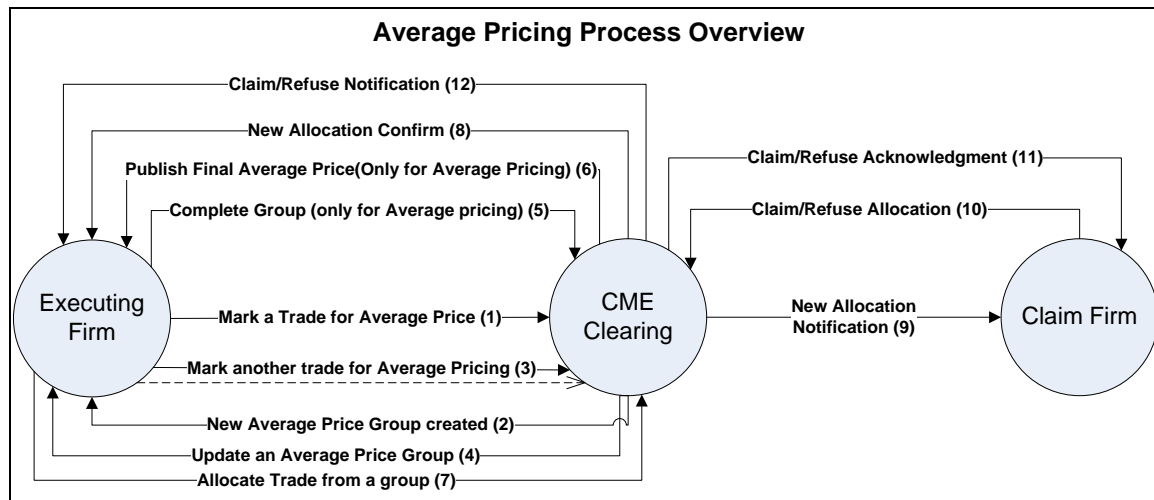
- Trade Date
- Instrument definition (Symbol)
- Side of Market

The clearing system creates a group and notifies the executing firm. Any additional trades that get added to the group result in updates to the group and notifications to the executing firm. Any specific information provided about the claim firm and account while marking a trade for average pricing will not be processed until the group is complete.

The executing firm can then complete the group. The clearing system notifies the executing firm of the completion status of the group and will provide the final average price. The executing firm can then begin allocating to firms with the final average price.

Unlike give-up groups, average price groups are more broad (criteria defined above). Once the group is complete and the firm starts allocating, the clearing system creates one or more allocations based on the fee criteria supported by the clearing system.

Unlike give-up groups, average price groups can contain trades with different parameters that incur different fees. The clearing system adds these parameters to individual allocations so firms can determine these fees. In the case where an individual allocation cannot be made without mixing together trades of different fee types, the clearing system splits the allocation into two or more allocations, each consisting of trades that have the same fee characteristics.



1.3.4 Supported Functions

The following table lists functions support by the API:

API Function	Description
Marking trades for allocation	Designates a trade for give-up. This includes indicating whether trades will be grouped for average pricing. Additionally, specific allocation information such as claiming firm, account, and origin can be appended, without the need to specify further allocation instructions.
Changing allocation parameters of marked trades	A trade, once marked for allocation, can be modified in several ways. <ul style="list-style-type: none"> • un-mark for allocation, in which case the executing firm will not give up the trade. • un-mark from a specific average price group. • move from one average price group to another. • change specific allocation information.
Completing an average price group	An executing firm can complete an average price group. The final average price will be calculated and sent to the firm, and the executing firm can then allocate the trades within that group.
Un-completing an average price group	An executing firm can modify a completed average price group so that it returns to its un-completed state, and the executing firm can add or remove more trades from the group.
Cancelling a give-up group	An executing firm can cancel a give-up group. This results in the clearing system cancelling all allocations for that group (if any), un-marking the trade for allocation, and deleting the give-up price group.
Cancelling an average price group	An executing firm can cancel an average price group. This results in the clearing system un-marking all trades from that average price group and deleting the average price group.
Submitting allocation instructions	Designates how a give-up group or an average price group should be allocated to claiming firms.
Amending or cancelling allocation instructions	Changes submitted allocations, or cancels the allocations altogether.
Notifying claiming firm of allocation	Notifies the claiming firm of the allocation alleged by the executing firm.
Notifying claiming firm of allocation amendment or cancellation	Notifies the claiming firm that the executing firm amended or cancelled the pending allocation.
Claim or refuse allocation	Notifies the clearing system whether the claiming firm is accepting or refusing the allocation proposed by the executing firm.
Reporting allocation status	The clearing system notifies both the executing firm and the claiming firm of the status of allocations.
Submitting sub-allocation instructions	The claiming firm in turn can submit instructions to sub-allocate trades previously allocated to it.

API Function	Description
Requesting reversal	Either the executing firm or the claiming firm can request a reversal. For the purposes of this document, release and reversal are interchangeable, and will be referred to as reversal.
Cancelling a reversal request	A reversal request can be cancelled by the initiator before the request has been accepted.
Notifying of reversal request to the opposite side	When a reversal request is received, the clearing system will notify the other firm of the requested reversal.
Accepting or refusing a reversal	The firm notified of a reversal request can respond to the request by accepting or refusing the reversal. The clearing system indicates the results of this action to both parties.

1.4 Modes of Connectivity

This API supports MQ Series connectivity:

Customers have the option of connecting over a secure network connection via Websphere MQ Series. Customers can submit messages through a remote queue while having message responses pushed to their local queue. MQ Series clients do not require user authentication since MQ is a secure method of transport.

For more information on MQ connectivity, refer to:

<http://www.cmegroup.com/globex/files/connectivityoptions.pdf>

2.0 Conceptual Message Flows

This section illustrates the interactions between the various organizations using conceptual messages, which use descriptions rather than specific message names.

2.1 Give-up Allocation

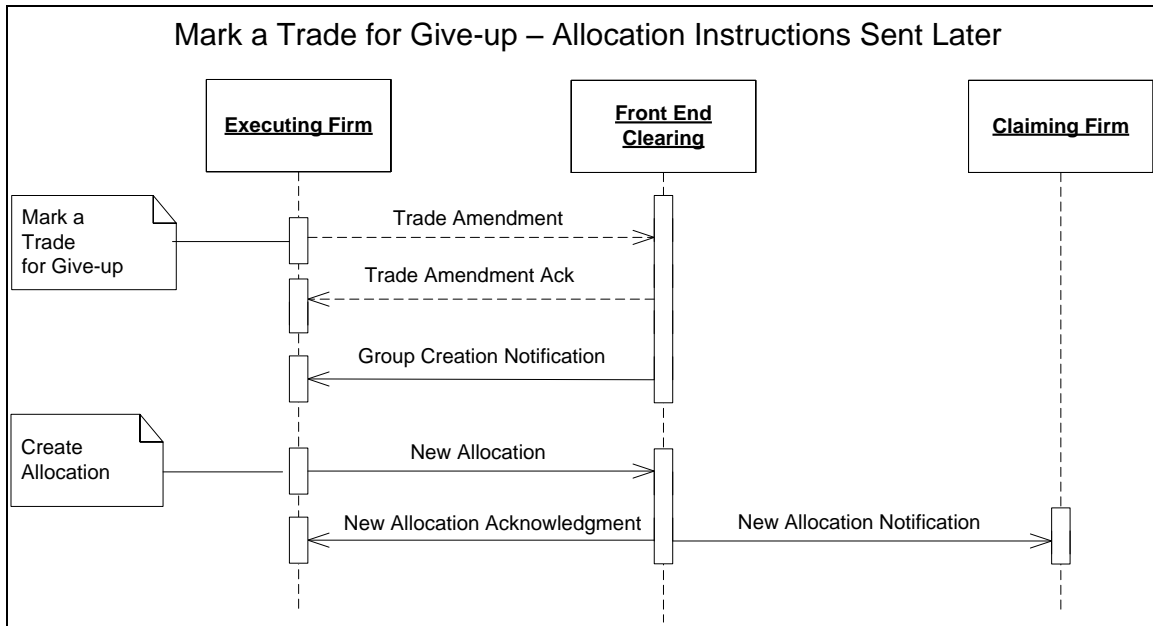
This section describes the work flows used in the vanilla give-up process.

2.1.1 Executing Firm Marks a Trade for Give-up

Scenario 1: Specifying allocation instructions later

In this scenario, an executing firm marks a trade for give-up:

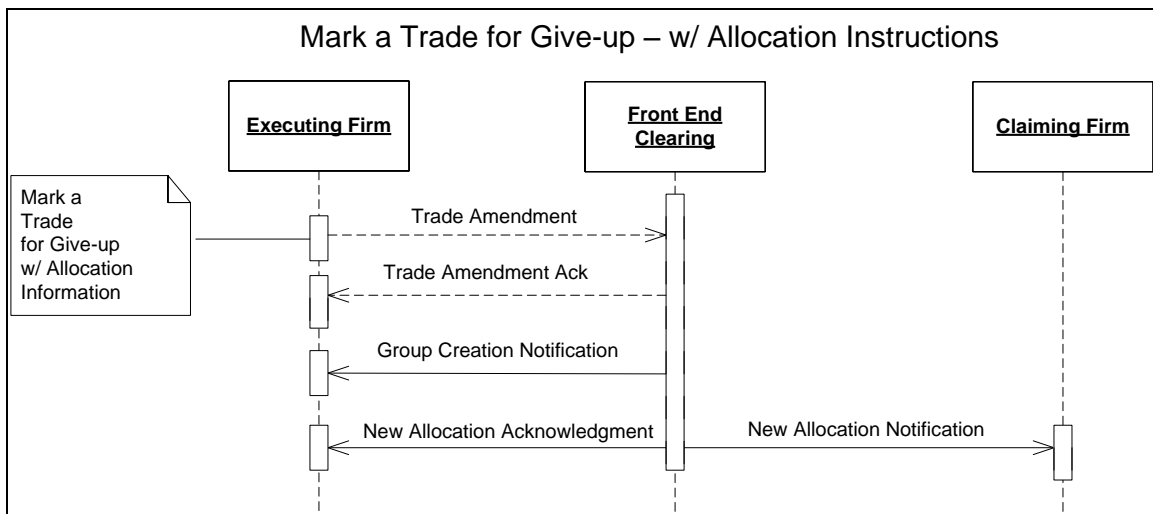
1. The executing firm either submits a new trade or amends a previously submitted trade with an indicator marking it for give-up.
2. The clearing system acknowledges the trade submission or amendment, creates a give-up allocation group, and indicates the status.
3. The executing firm submits allocation instructions, allocating the group to a single claiming firm.
4. The clearing system:
 - Acknowledges the allocation to the executing firm.
 - Notifies the claiming firm of the allocation.



Scenario 2: Marking and specifying allocation instructions

In this scenario, the executing firm marks a trade by specifying allocation instructions, bypassing the need to send a separate instruction to allocate to a claiming firm:

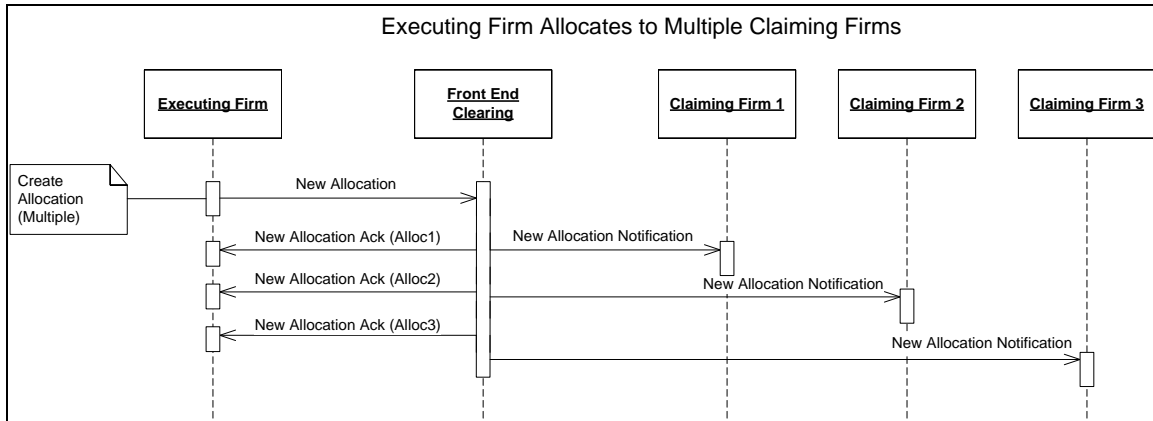
1. The executing firm either submits a new trade, or amends a previously submitted trade, with an indicator marking it for give-up, and including allocation information.
2. The clearing system:
 - Acknowledges the trade submission or amendment.
 - Creates a give-up allocation group, and indicates its status to the claiming firm.
 - Acknowledges an allocation to the executing firm.
 - Notifies the claiming firm of a new allocation.



Scenario 3: Marking and specifying multiple allocation instructions

In this scenario, the trade has already been marked for give-up. The executing firm submits an allocation with multiple allocation instructions targeting multiple claiming firms:

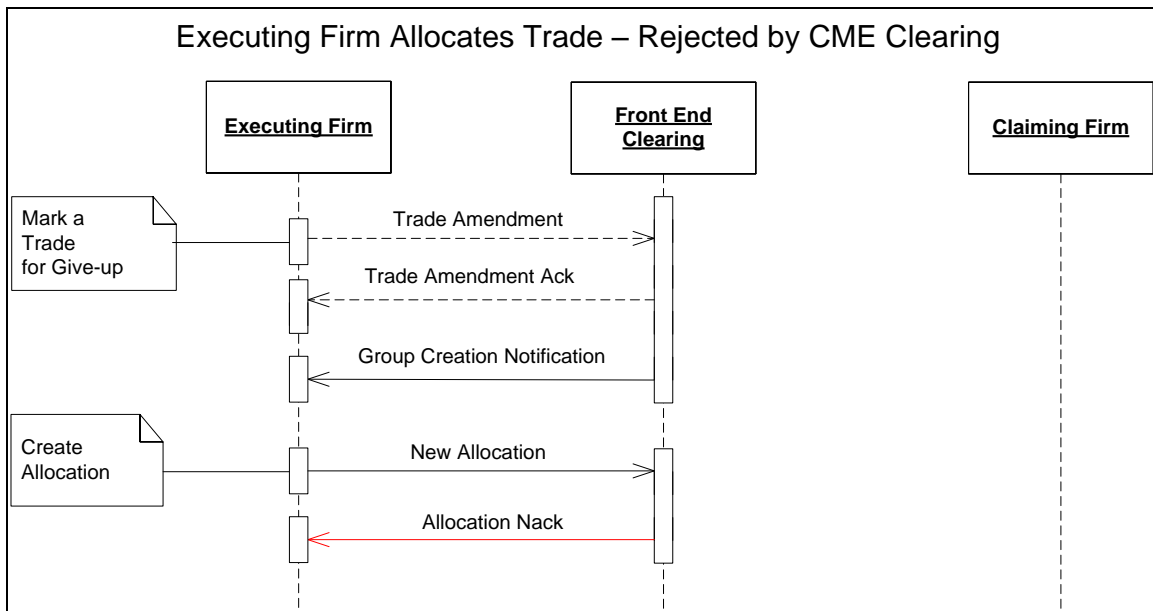
1. The executing firm receives multiple acknowledgements for the allocation instructions; one for each instruction.
2. Each claiming firm is notified of the new allocation.



2.1.2 Executing Firm Marks a Trade for Give-up – Rejected by Clearing System

In this scenario, the clearing system rejects an inbound request to allocate a trade:

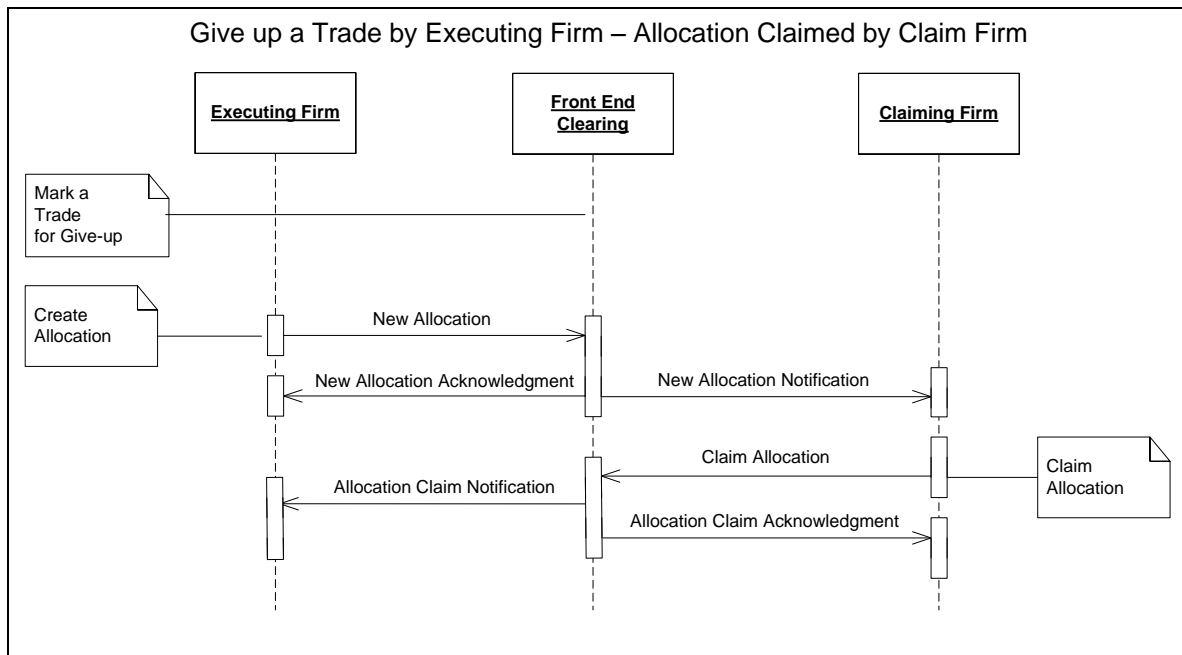
1. The executing firm either submits a new trade or amends a previously submitted trade with an indicator marking it for give-up and includes allocation information. This action proves invalid.
2. The clearing system responds with a clearing system reject. The claiming firm is never notified.



2.1.3 Executing Firm Allocates Trade – Allocation Claimed by Claiming Firm

In this scenario, the executing firm marked a trade for give-up and allocated it to a claiming firm. The claiming firm claims the allocation:

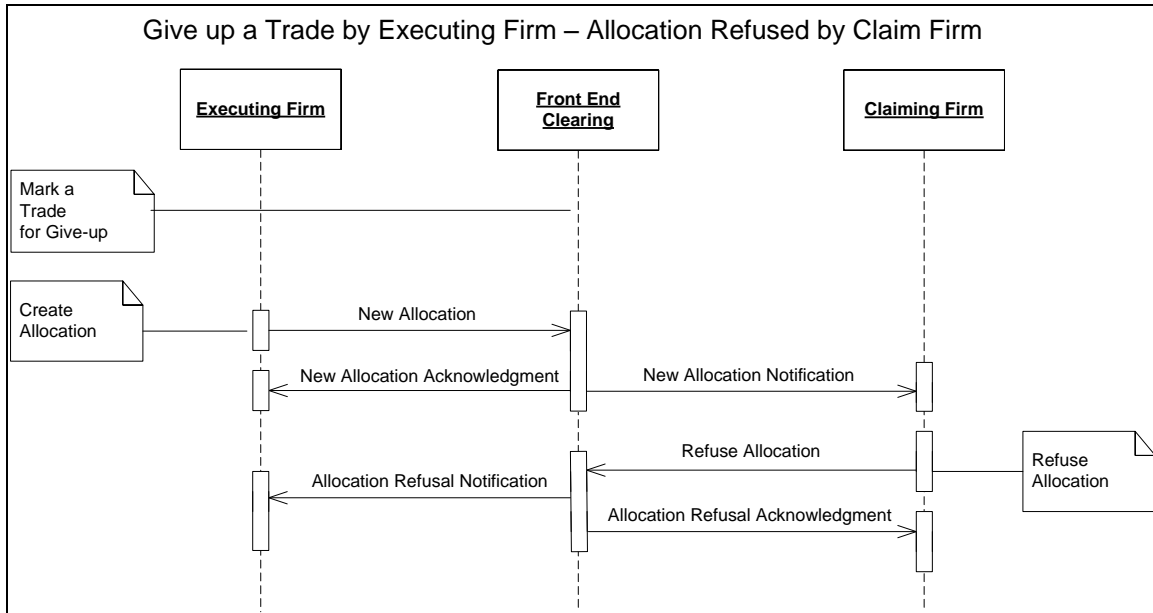
1. The claiming firm claims the allocation.
2. The clearing system:
 - Sends the claiming firm an acknowledgment.
 - Notifies the executing firm of the claim.



2.1.4 Executing Firm Allocates Trade - Allocation Refused by Claiming Firm

In this scenario, the executing firm marked a trade for give-up and allocated it to a claiming firm. The claiming firm refuses the allocation:

1. The claiming firm refuses the allocation.
2. The clearing system:
 - Acknowledges the claiming firm of the refusal.
 - Notifies the executing firm of the refusal.



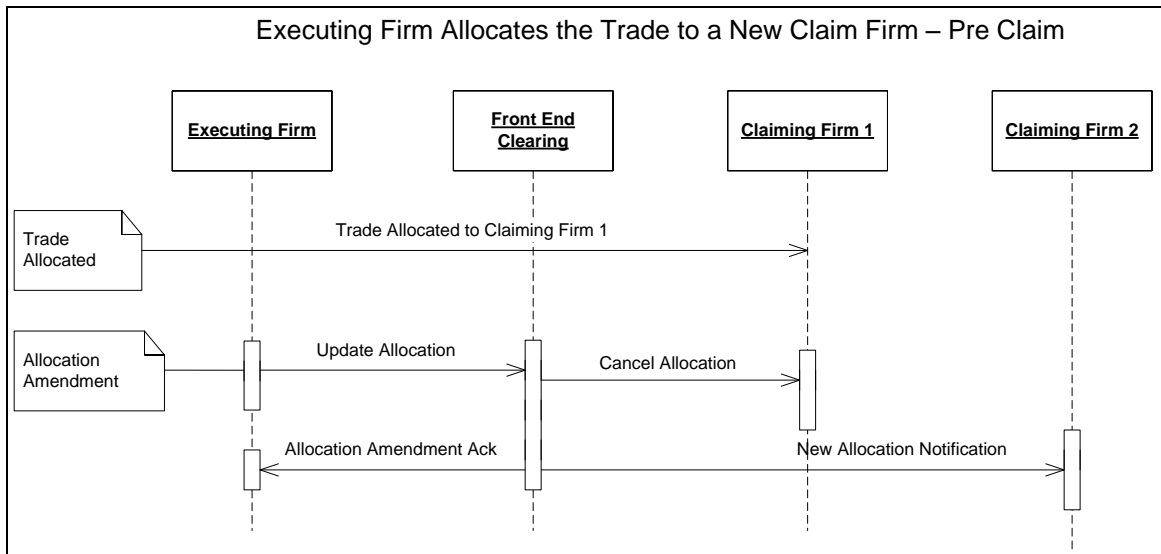
2.1.5 Executing Firm Amends an Allocation – Pre-claim

Scenario 1: Executing firm amends allocation to a new claiming firm

In this scenario, the executing firm allocated a trade to a claiming firm and amended it to allocate it to a different claiming firm before the first claiming firm claimed the trade:

1. The executing firm amends the allocation to give up the entirety of the trade to claiming firm 2.
2. The clearing system:
 - Acknowledges the amendment to the executing firm.
 - Notifies claiming firm 1 that the allocation is cancelled.

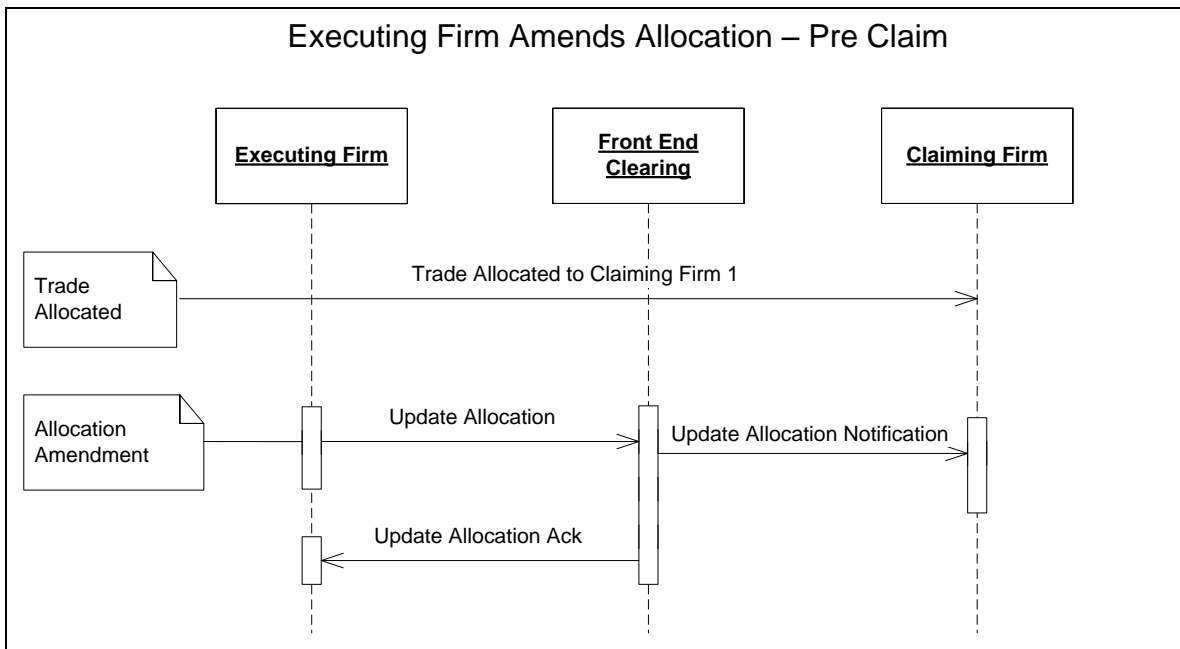
- Notifies claiming firm 2 of the new allocation.



Scenario 2: Executing firm amends allocation – updates account or quantity on the allocation

In this scenario, the executing firm marked a trade for give-up and allocated it to a claiming firm:

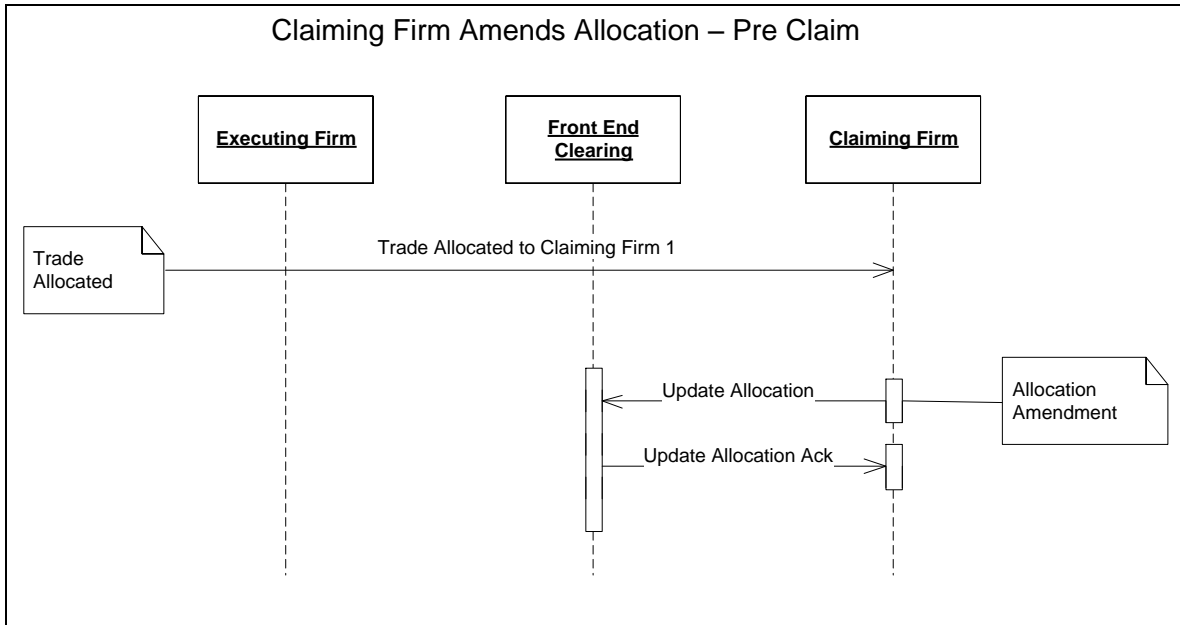
1. The executing firm amends the allocation to reduce the quantity of the trade allocated to the claiming firm.
2. The clearing system:
 - Acknowledges the amendment to the executing firm.
 - Notifies the claiming firm that the allocation is amended.



2.1.6 Claiming Firm Amends an Allocation – Pre-claim

In this scenario, the executing firm marked a trade for give-up and allocated it to a claiming firm:

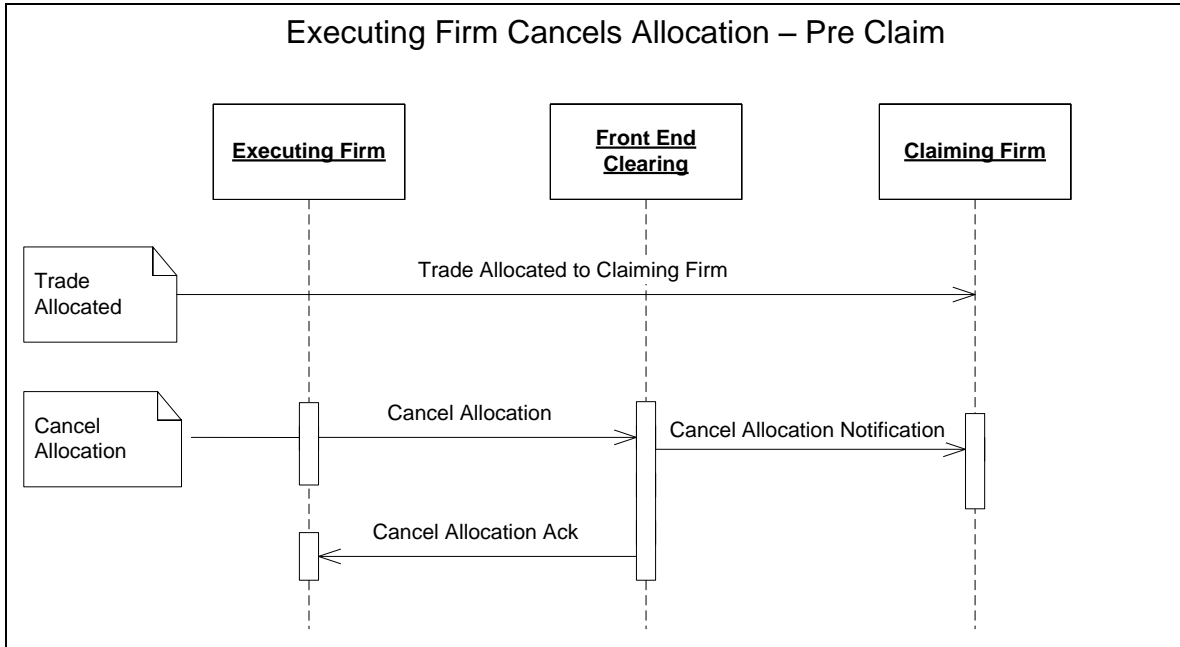
1. The claiming firm amends the allocation to change an attribute of the trade, such as the carry account, origin, and CTI.
2. The clearing system:
 - Acknowledges the amendment to the claiming firm.



2.1.7 Executing Firm Cancels an Allocation – Pre-claim

In this scenario, the executing firm marked a trade for give-up and allocated it to a claiming firm. The executing firm initiates a cancel before the allocation is claimed by the claiming firm:

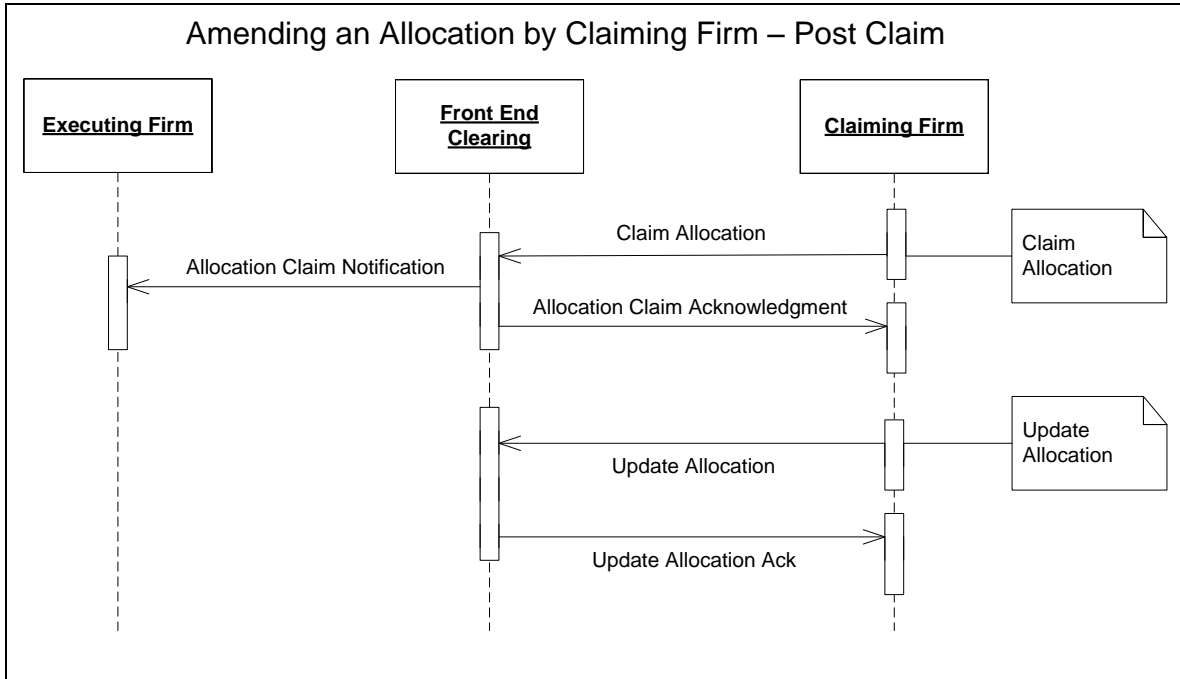
1. The executing firm cancels the allocation.
2. The clearing system:
 - Acknowledges the cancellation to the executing firm.
 - Notifies the claiming firm that the allocation is cancelled.



2.1.8 Claiming Firm Amends an Allocation – Post-claim

In this scenario, the claiming firm amends a previously allocated and claimed allocation:

1. The claiming firm amends the allocation. Examples of fields that can be amended include the carry account, origin, and CTI.
2. The clearing system acknowledges the amendment to the claiming firm. The clearing system does not notify the executing firm.



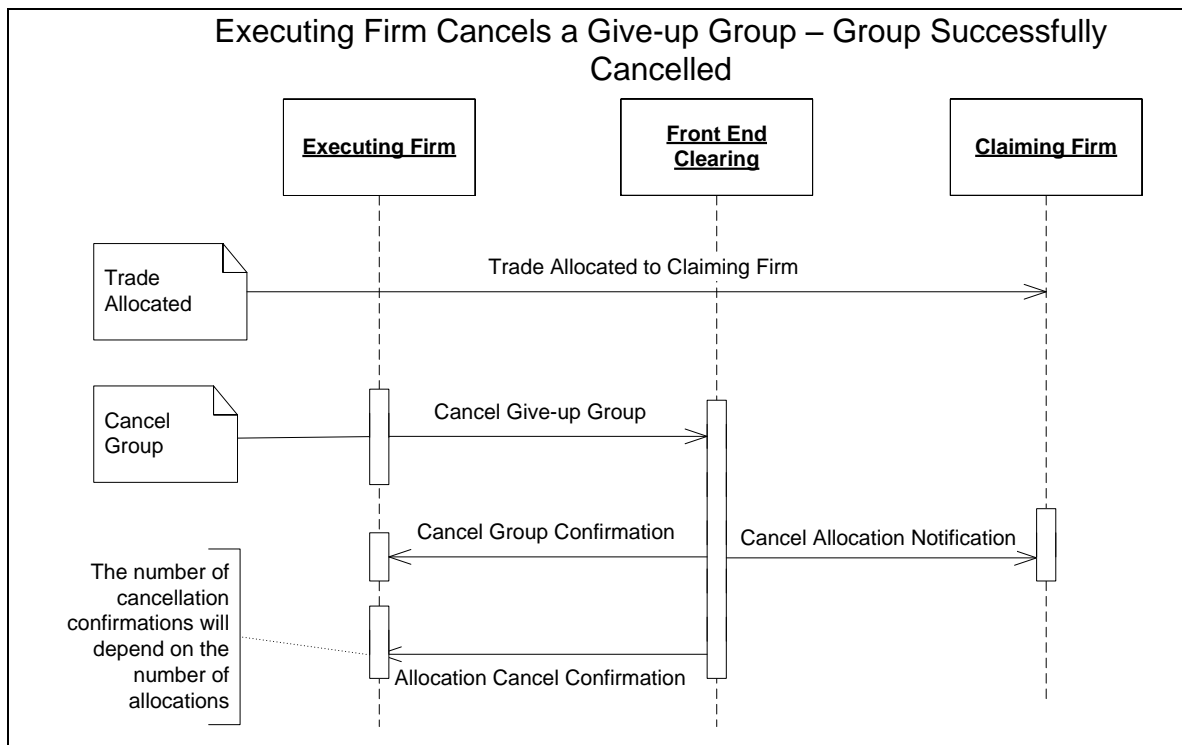
2.1.9 Executing Firm Cancels a Give-up Group

Scenario 1: No claimed allocations

In this scenario, the executing firm allocated a trade to a claiming firm. The claiming firm has not claimed the allocation. The execution firm initiates the cancel of a give-up group:

1. The executing firm cancels the give-up group.
2. The clearing system:
 - Updates the group to a zero quantity and send a group summary with zero quantity confirming the group cancellation.
 - Each trade that was part of the group will be un-marketed from allocation.
 - Notifies the claiming firm that the previously submitted allocation (if any exists) is cancelled.
 - Notifies the executing firm that the previously submitted allocation (if any exists) is cancelled.

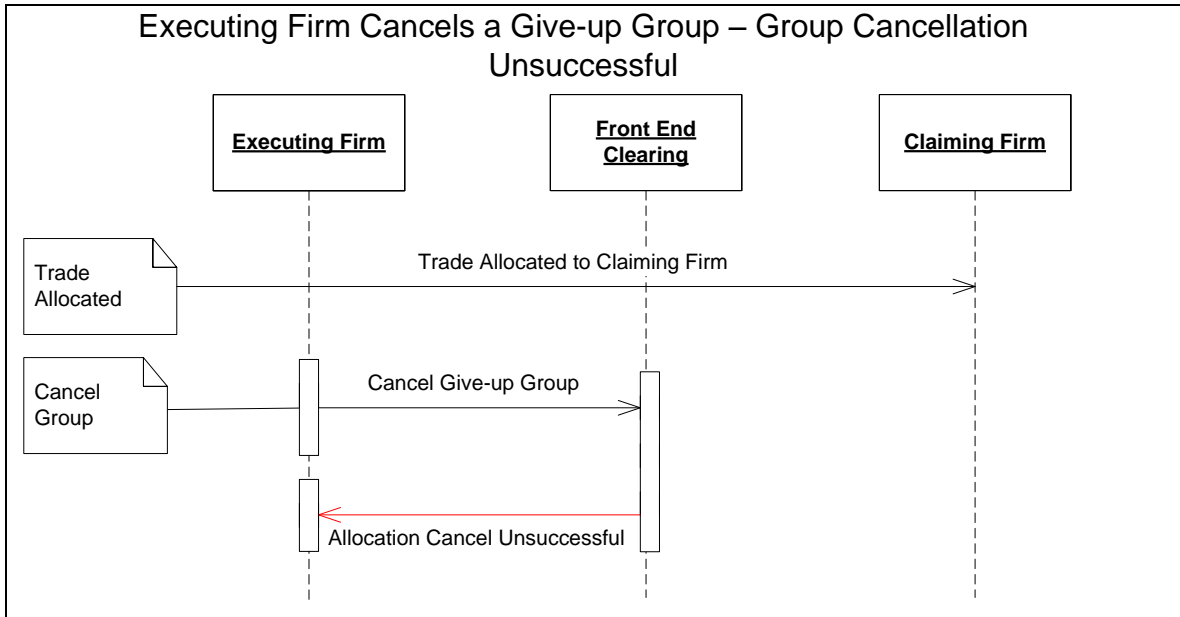
Note: Trade updates are not sent to notify the executing firm that the trade is un-marked from allocation.



Scenario 2: Claimed allocations exist

In this scenario, the executing firm allocated a trade to a claiming firm. The claiming firm claimed the allocation. The execution firm initiates the cancel of the give-up group:

1. The executing firm cancels the give-up group.
2. The clearing system rejects the group cancellation message.

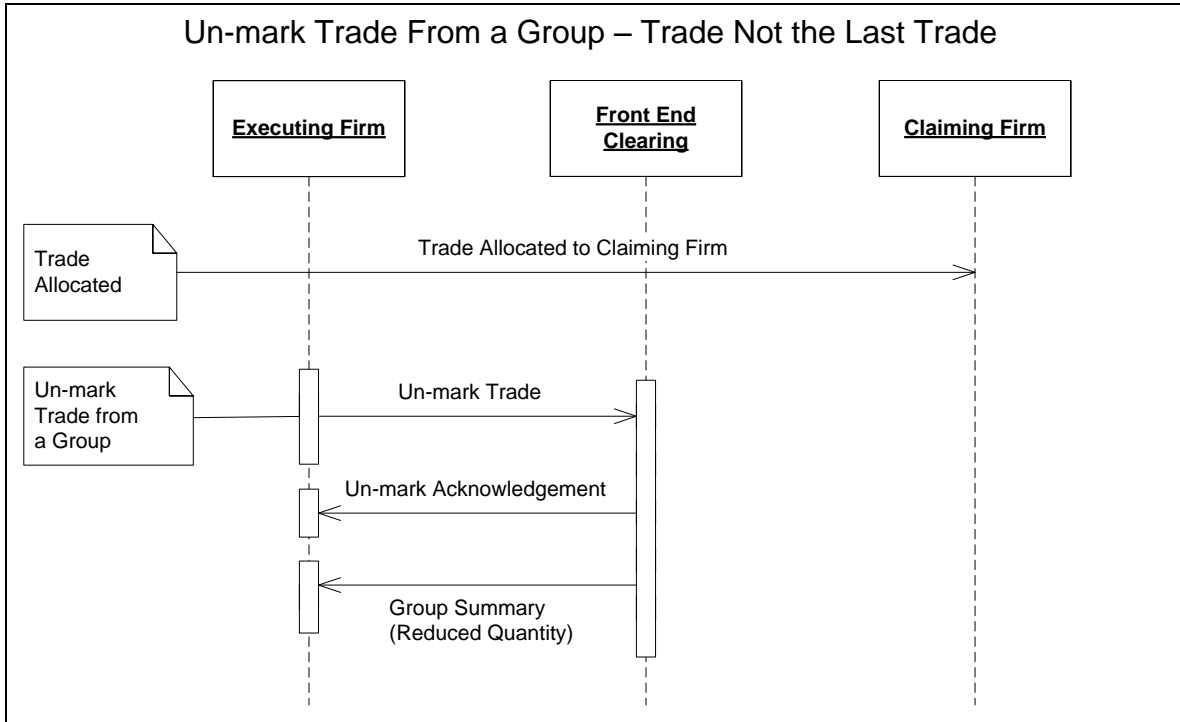


2.1.10 Executing Firm Un-marks a Trade From Give-up

Scenario 1: Trade is not the last trade in the group

In this scenario, trades have been added to a group and they have been allocated to a claiming firm. The trade is not the last trade in the group. The executing firm un-marks a trade:

1. The executing firm un-marks the trade from the give-up group.
2. The clearing system:
 - Acknowledges the trade amendment to the executing firm.
 - Sends a group summary to the executing firm showing a reduced group quantity.

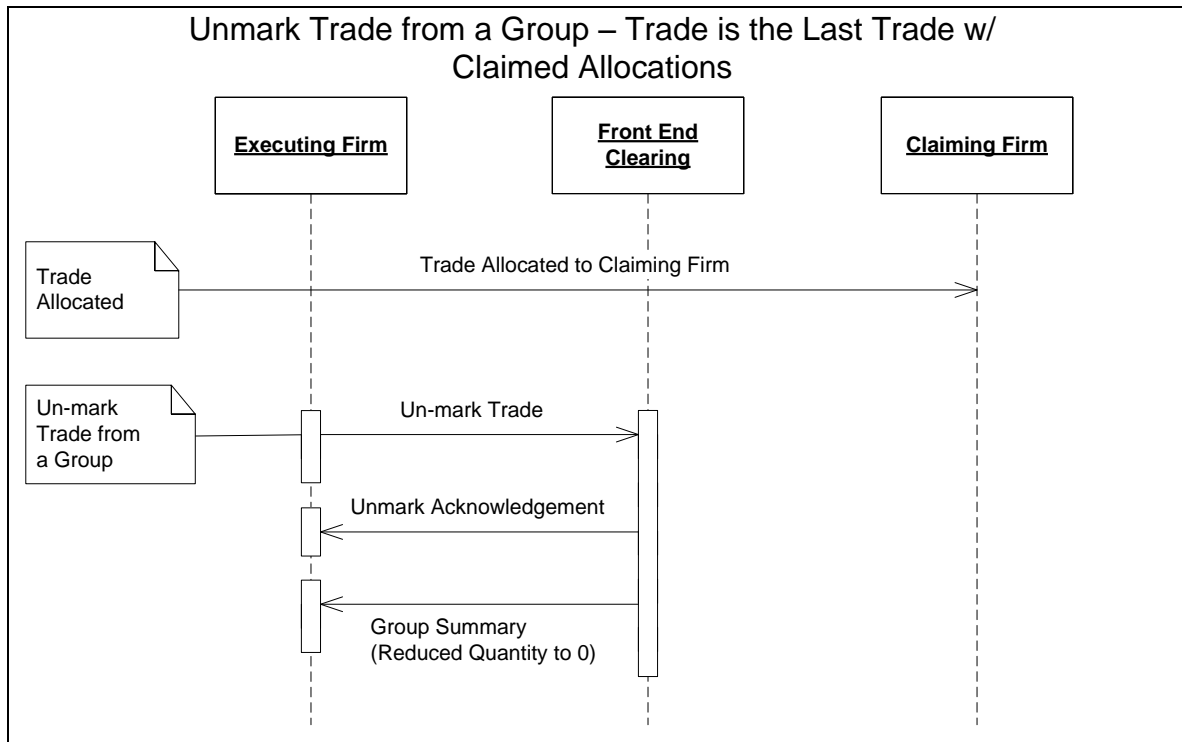


Scenario 2: Trade is the last trade in the group – with claimed allocations

In this scenario, a trade is added to a group and is allocated to a claiming firm. Some of the allocations have been claimed. The executing firm un-marks a trade. The trade is the last trade in the group:

1. The executing firm un-marks the trade from the give-up group.
2. The clearing system:
 - Acknowledges the trade amendment to the executing firm.
 - Sends a group summary to the executing firm with a Group Quantity of 0.

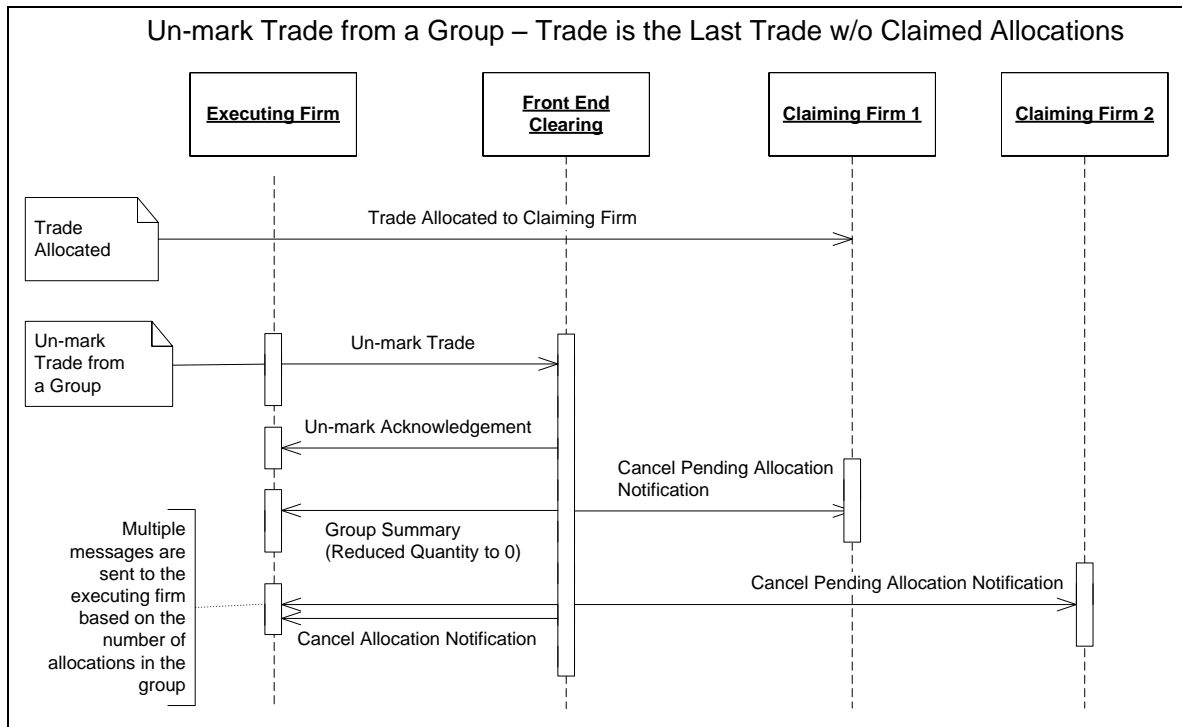
Note: The group is not deleted because there are claimed allocations.



Scenario 3: Trade is the last trade in the group – without claimed allocations

In this scenario, trades are added to a group and are allocated to a claiming firm. All the allocations are pending. The executing firm unmarks a trade. The trade is the last trade in the group:

1. The executing firm un-marks the trade from the give-up group.
2. The clearing system:
 - Acknowledges the trade amendment to the executing firm.
 - Sends a group summary to the executing firm showing the group is cancelled.
 - Sends allocation cancel notifications to the executing firm. The number of cancel messages will depend on number of allocations that were created from the group.
 - Sends allocation cancel notifications to the claiming firms with the pending allocations.



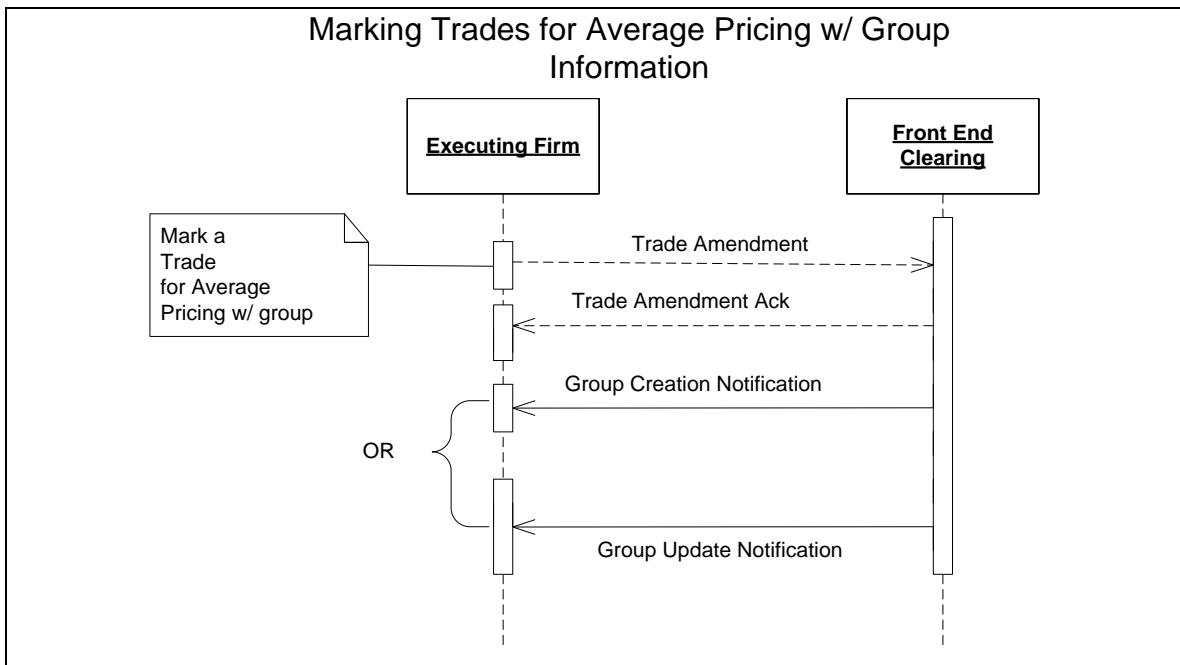
2.2 Average Price Allocation

This section describes the conceptual flows for average pricing trades.

2.2.1 Executing Firm Marks Trades for Average Pricing

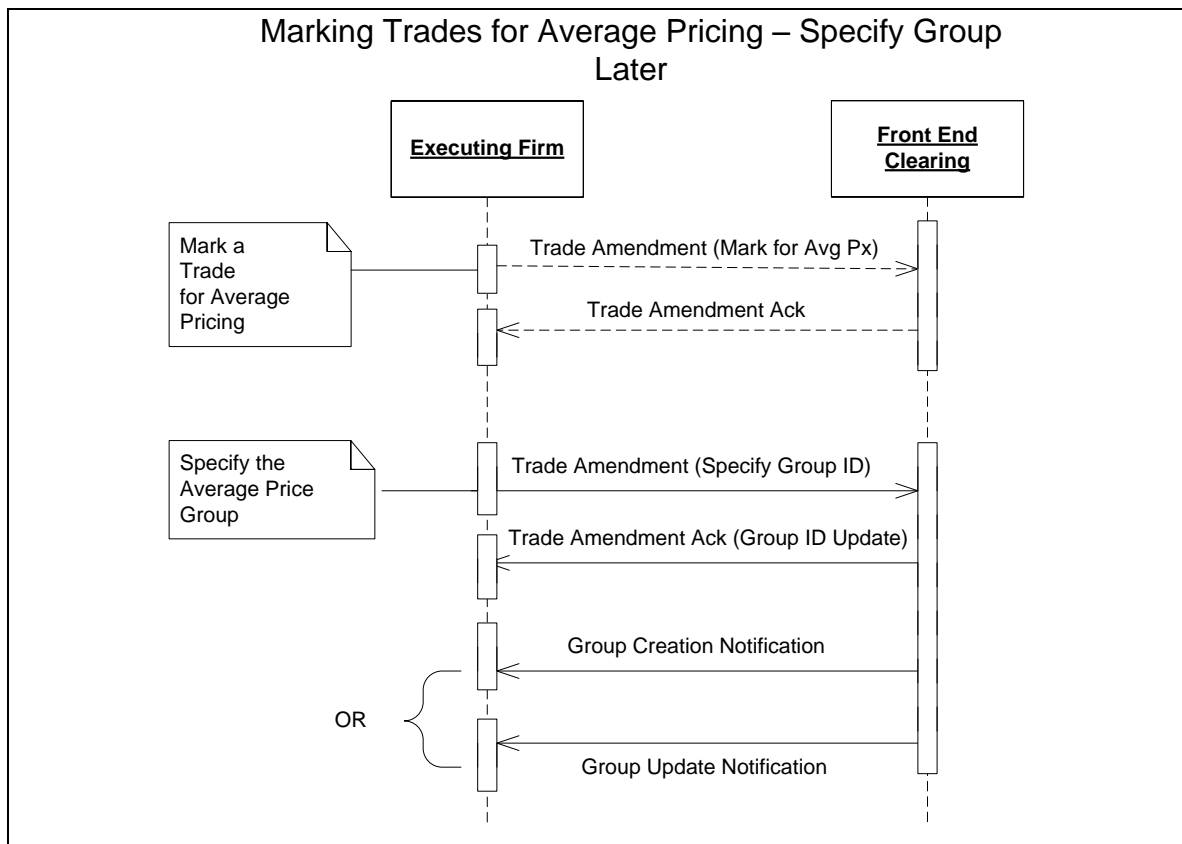
Scenario 1: Average price group specified at time of marking

1. The executing firm marks a trade (trade amendment) for average pricing by specifying an average price group ID.
2. The clearing system:
 - Acknowledges the executing firm of the trade amendment that marked it for average pricing.
 - Creates a new group, if it does not exist, and sends a group summary creation notification to the executing firm, or
 - Alternatively, if the group already exists, updates the group and sends a group summary notification to the executing firm.



Scenario 2: Specifying an average price group later

1. The executing firm marks a trade (trade amendment) for average pricing without specifying a group.
2. The clearing system acknowledges the executing firm of the trade amendment and marks it for average pricing.
3. The executing firm updates the trade again by specifying an average price group.
4. The clearing system:
 - Acknowledges the executing firm of the group update.
 - If the group does not exist, creates a new group and sends a group summary creation notification to the executing firm, or
 - Alternatively, if the group already exists, the clearing system updates the group and sends a group summary notification to the executing firm.

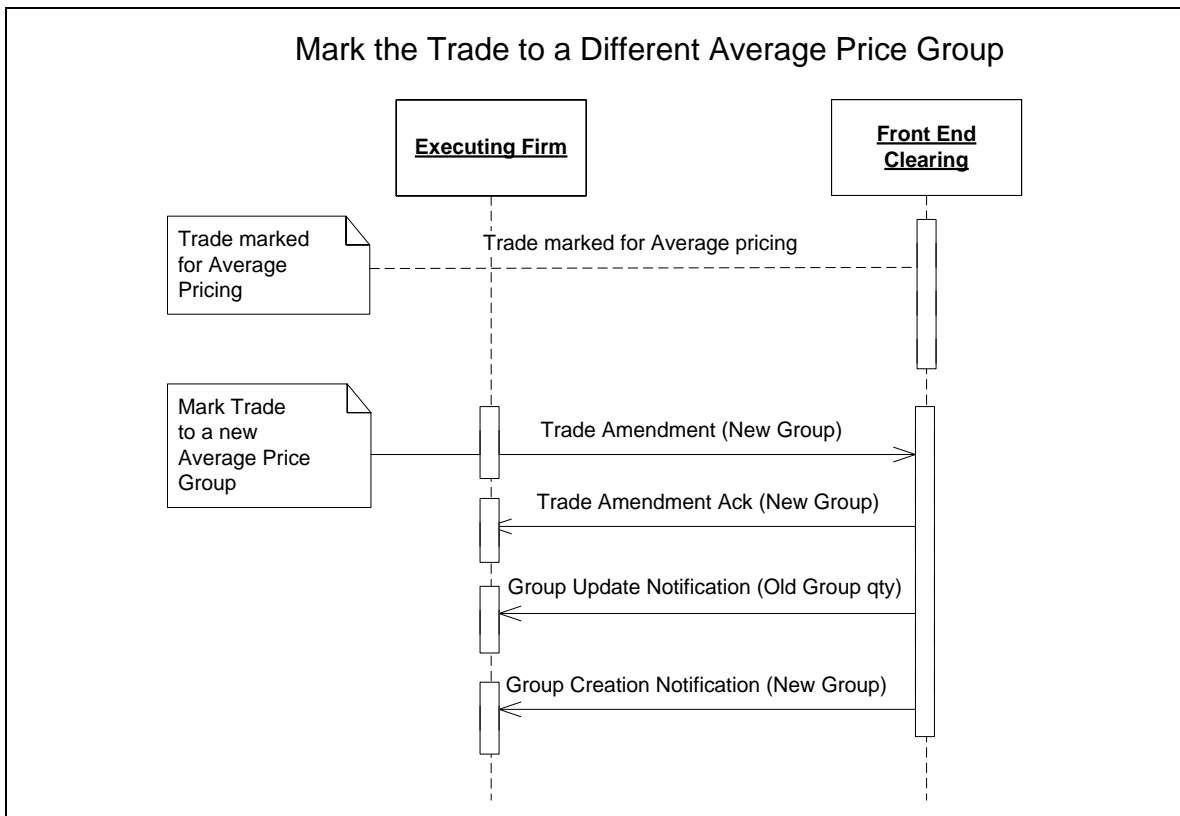


Scenario 3: Marking a trade for another average price group

In this scenario, the executing firm marked the trade to a group, and then marked the trade to a different group:

1. The executing firm marks a trade, changing the average price group.
2. The clearing system:
 - Acknowledges the executing firm of the trade amendment marking it to a new average price group.
 - Sends a group summary update notification to the executing firm updating (reducing) the old group quantity.
 - Sends a group summary Create or Update notification to the executing firm for the new group.

Note: The trade can be marked to a different average price group only if the group is not complete.

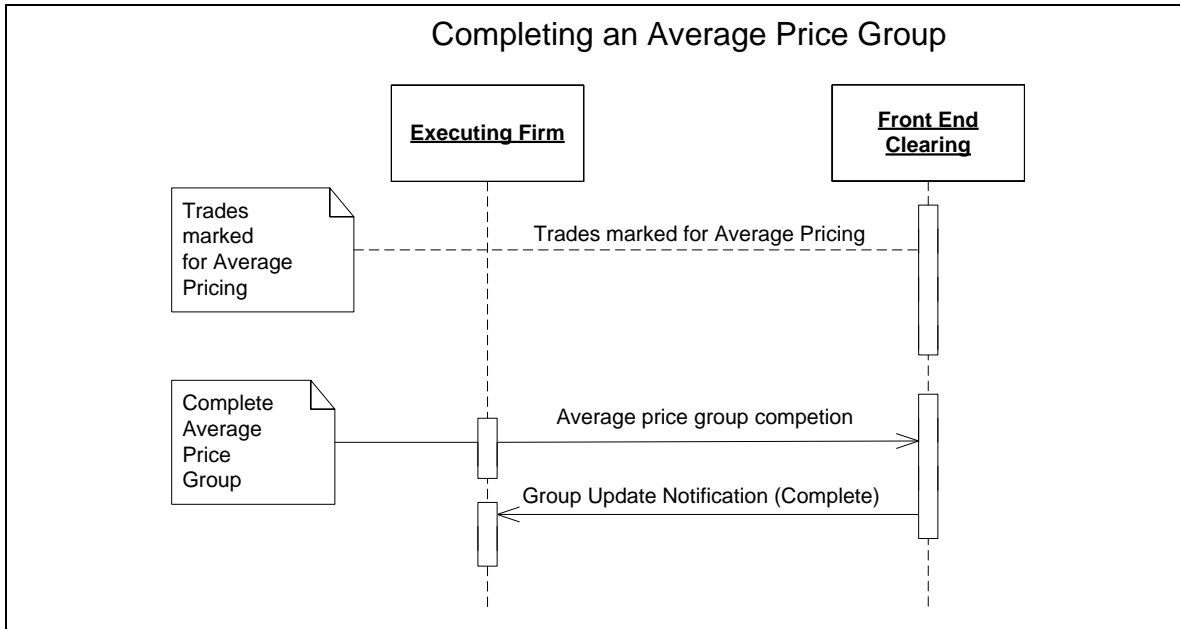


2.2.2 Executing Firm Completes an Average Price Group

In this scenario, the executing firm added all the trades to the average price group and completes the average price group:

1. The executing firm sends a group complete message to the clearing system.
2. The clearing system sends a group summary update notification with a status of complete.

Note: When the group is complete, the executing firm can allocate.

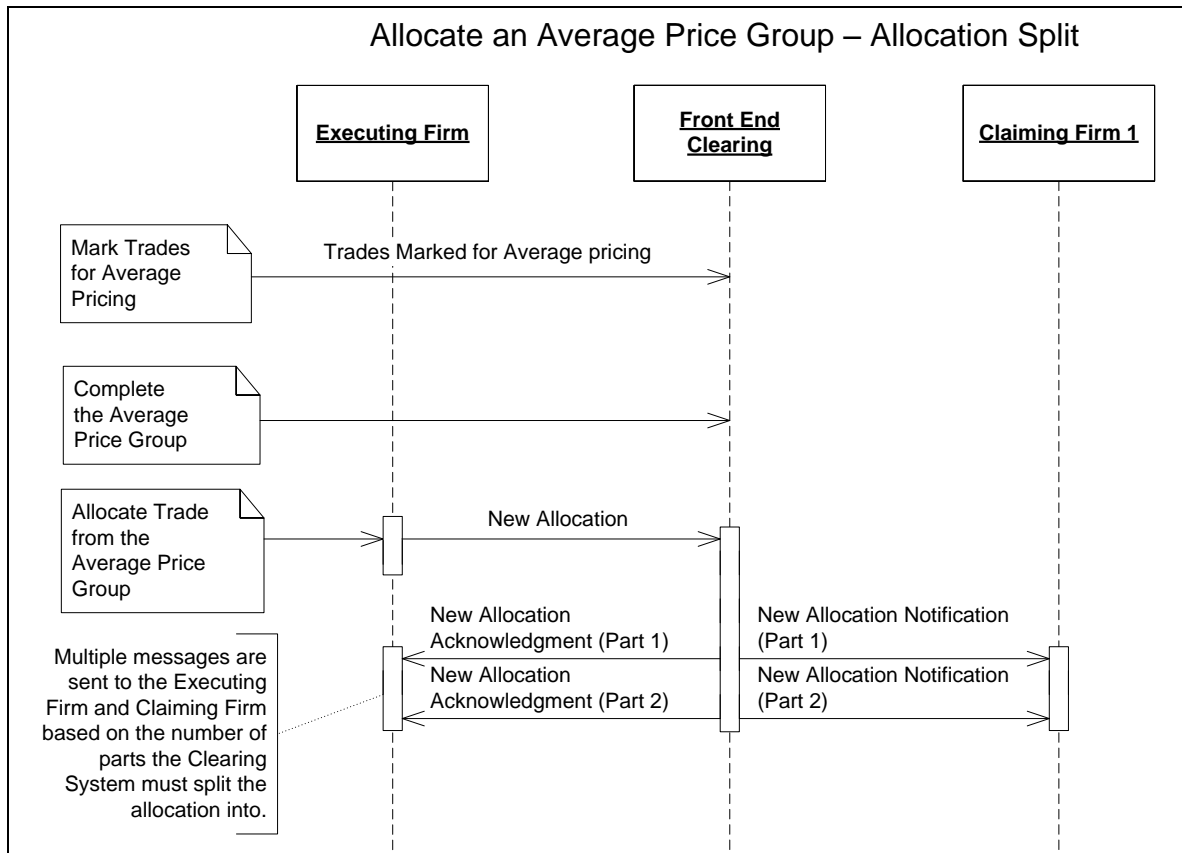


2.2.3 Executing Firm Allocates an Average Price Group After Group Completion – Clearing System Splits Allocation

In this scenario, the executing firm marked trades for give-up. The executing firm completes the group, and then submits an allocation, which requires the clearing system to split the allocation into multiple allocations based on fee criteria, as defined by CME Clearing:

1. The executing system submits an allocation on a completed group.
2. The clearing system:
 - Sends the executing firm two acknowledgments; one for each split allocation.
 - Sends the claiming firm two notifications; one for each split allocation.

Example: The executing firm added a quantity of 10 Pit and 10 X-Pit to the group and completes the group. If the executing firm then submits an allocation of 15, two allocations are created, and the executing firm receives two messages for the single allocation request.



2.2.4 Executing Firm Amends Average Pricing Allocation

In this scenario, the executing firm amends an average pricing allocation by increasing the allocation quantity.

Scenario 1:

The new allocated quantity results in an update to the existing allocation quantity. No split is required; the scenario is identical to give-up allocation.

Scenario 2:

In this scenario, the clearing system amends the existing quantity, and additionally creates one or more allocations with the remaining quantity:

1. The clearing system amends the existing allocation to increase the allocated quantity, but not to the full quantity requested.
2. The clearing system creates one or more allocations to account for the remaining quantity. These allocations will have fee criteria that differ from the existing allocation.

Scenario 3:

In this scenario, the clearing system creates one or more new allocations with the remaining quantity:

1. The clearing system creates one or more allocations to account for the entirety of the increase in quantity.

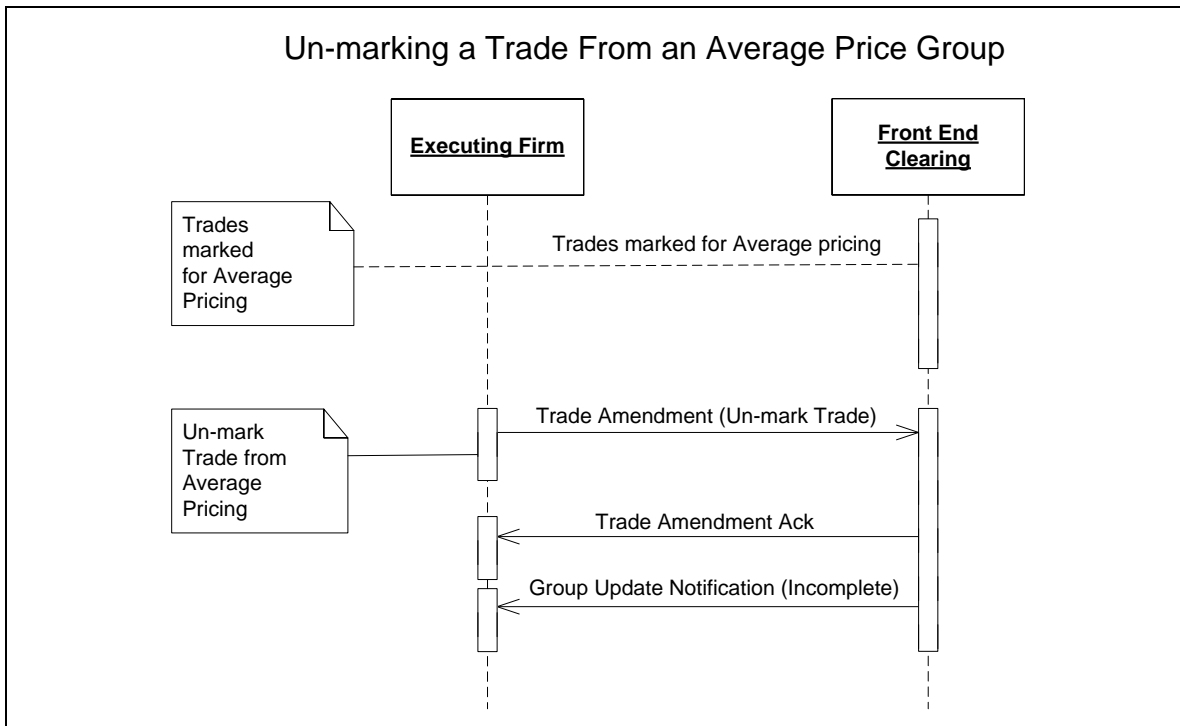
These scenarios are similar to the scenarios above and are not illustrated.

2.2.5 Executing Firm Un-marks a Trade From an Average Price Group

In this scenario, the executing firm removes a trade from an average price group. The firm has the option to leave it marked for average pricing and specify a new group later.

1. The executing firm un-marks a trade, either from average pricing or from an average price group, by amending the trade.
2. The clearing system:
 - Acknowledges the executing firm of the trade amendment to unmark the trade from Average pricing.
 - Sends a group summary update notification to the executing firm.

Note: Trades can be un-marked only if the group is not already complete. Otherwise, the clearing system rejects the un-marking of the trade.



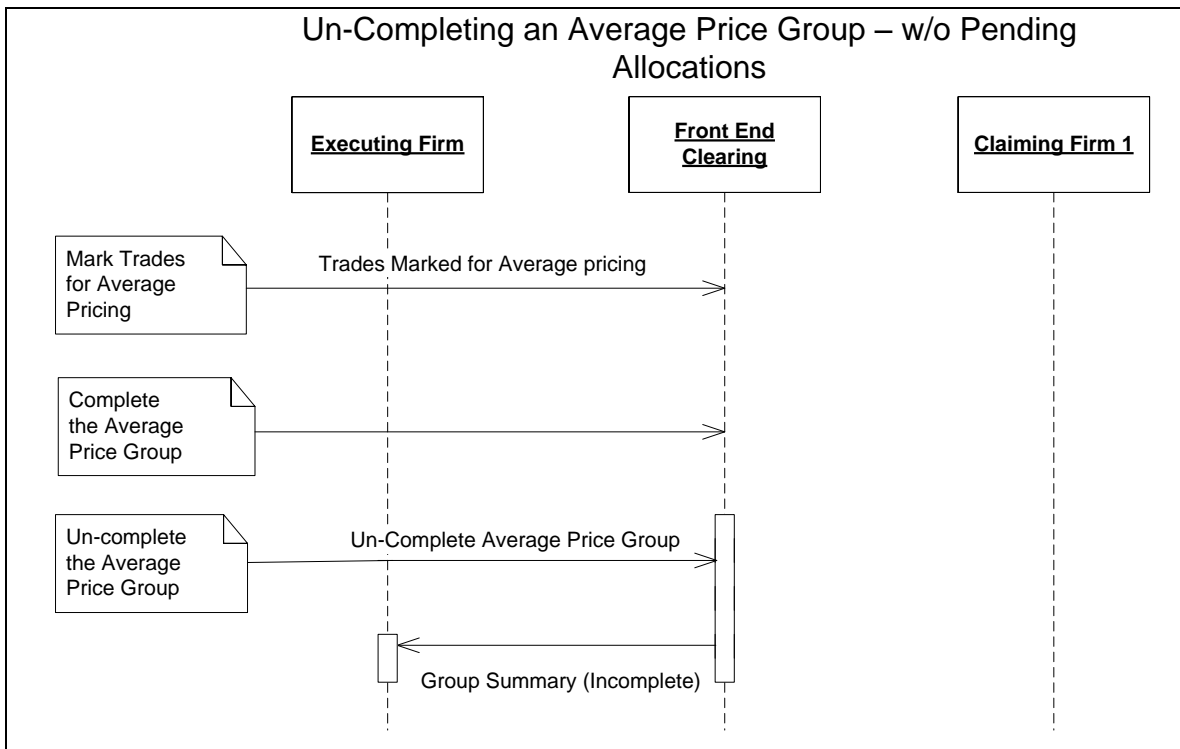
2.2.6 Executing Firm Un-completes an Average Price Group

Un-completing an average price group transitions the group's status to incomplete and allows the executing firm to change the group by adding or removing trades. Un-completing a group cancels any pending allocations.

Scenario 1: Group has no pending allocations

In this scenario, the executing firm has added trades to an average price group and completed the average price group:

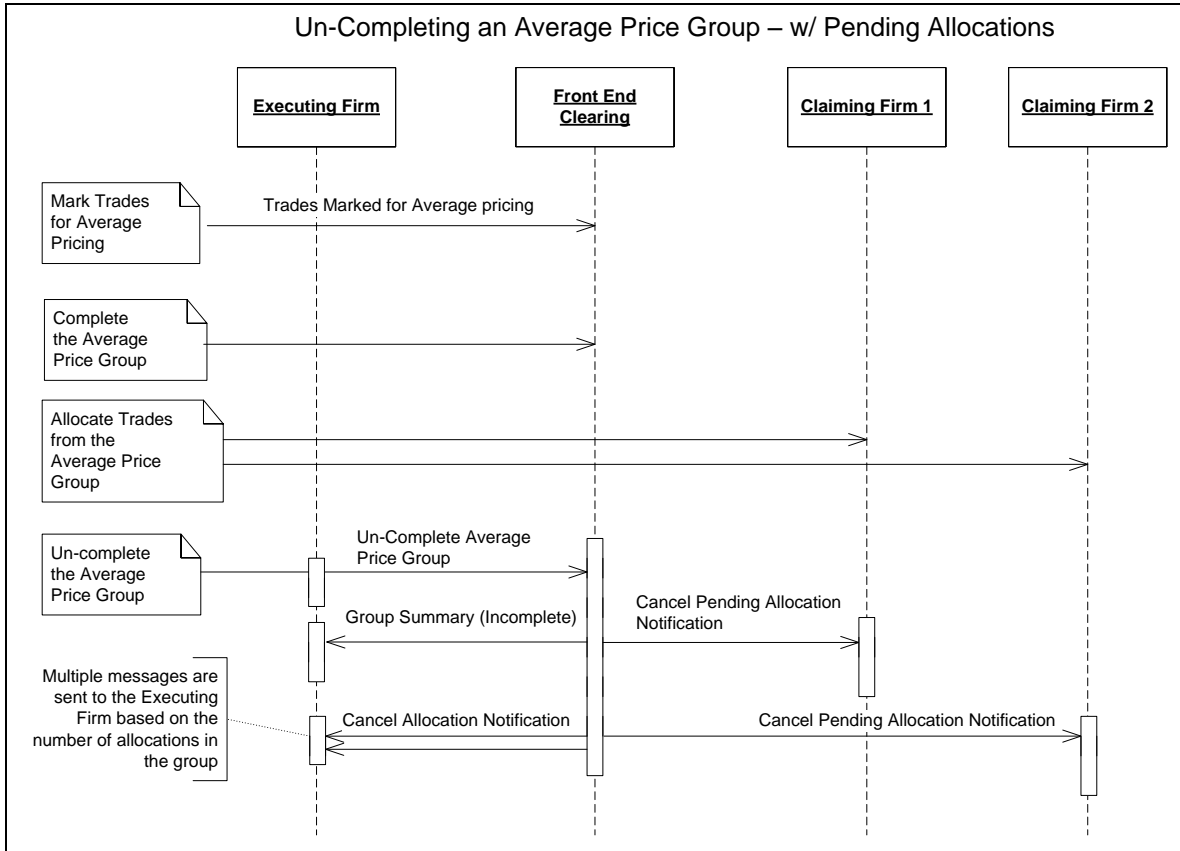
1. The executing firm un-completes the average price group.
2. The clearing system sends the executing firm a group summary, indicating the group is incomplete.



Scenario 2: Group has pending allocations

In this scenario, the executing firm added trades to an average price group and completed the average price group. The group has pending allocations:

1. The executing firm un-completes the average price group.
2. The clearing system:
 - Sends the executing firm a group summary showing the group as incomplete.
 - Notifies the claiming firm(s) about the cancellation of the pending allocation(s).
 - Acknowledges the allocation cancellation(s) to the executing firm.



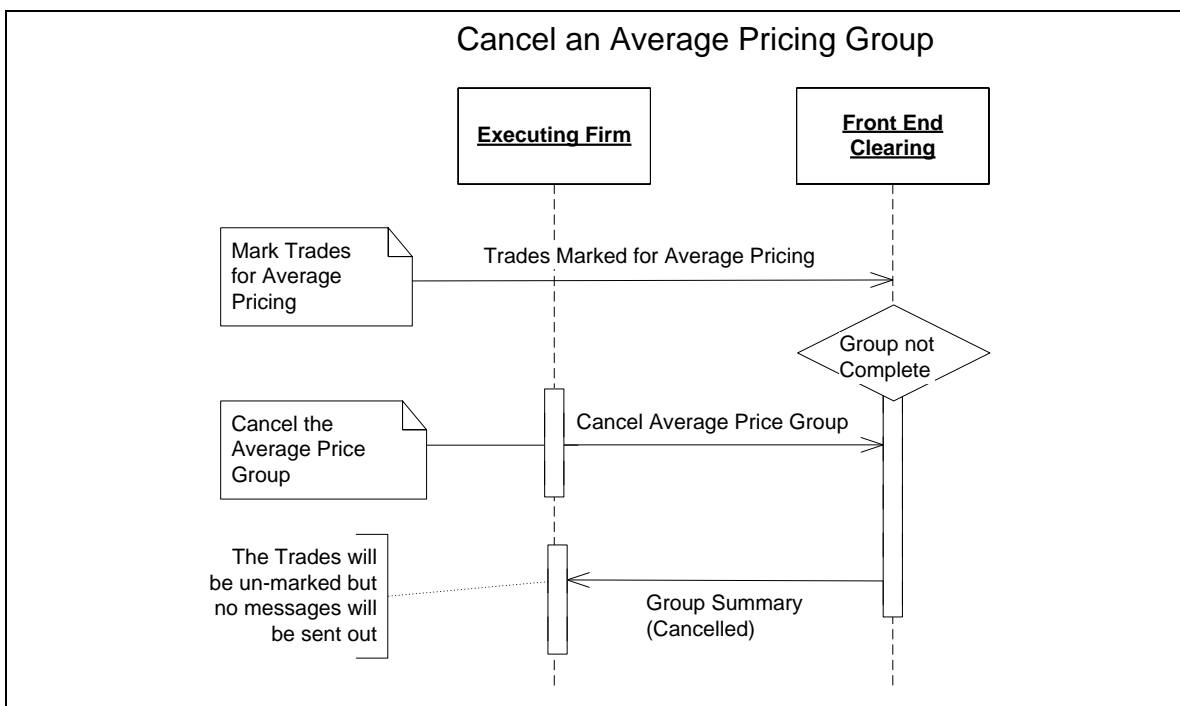
2.2.7 Executing Firm Cancels an Average Price Group

In this scenario, the executing firm added trades to an average price group and the average price group has not yet been completed:

1. The executing firm cancels the average price group.
2. The clearing system sends the executing firm a group summary indicating that the group is cancelled.

Note: A group can be cancelled only if the group is not already completed.

Note: No trade updates are sent to the executing firm notifying that the trade is un-marked from allocation.



2.3 Sub-allocation

Once an allocation has been accepted, the claiming firm can sub-allocate the allocation. A sub-allocation request causes the clearing system to create a new give-up group for the allocation to the original claiming firm, or assign the claimed allocation to an existing give-up group.

If the sub-allocation is being average priced, an average price group is created and this behavior is similar to average pricing a trade. The average price group created due to a sub-allocation must be completed before allocation can begin. The message flow proceeds as if the claiming firm were the original executing firm:

- the request is acknowledged
- the claiming firm receives a group summary
- the claiming firm(s) for the sub-allocation is notified.

Note: In all cases, a claiming firm must first accept the allocation then perform a sub-allocation with a separate message. Both operations may not be combined in a single message.

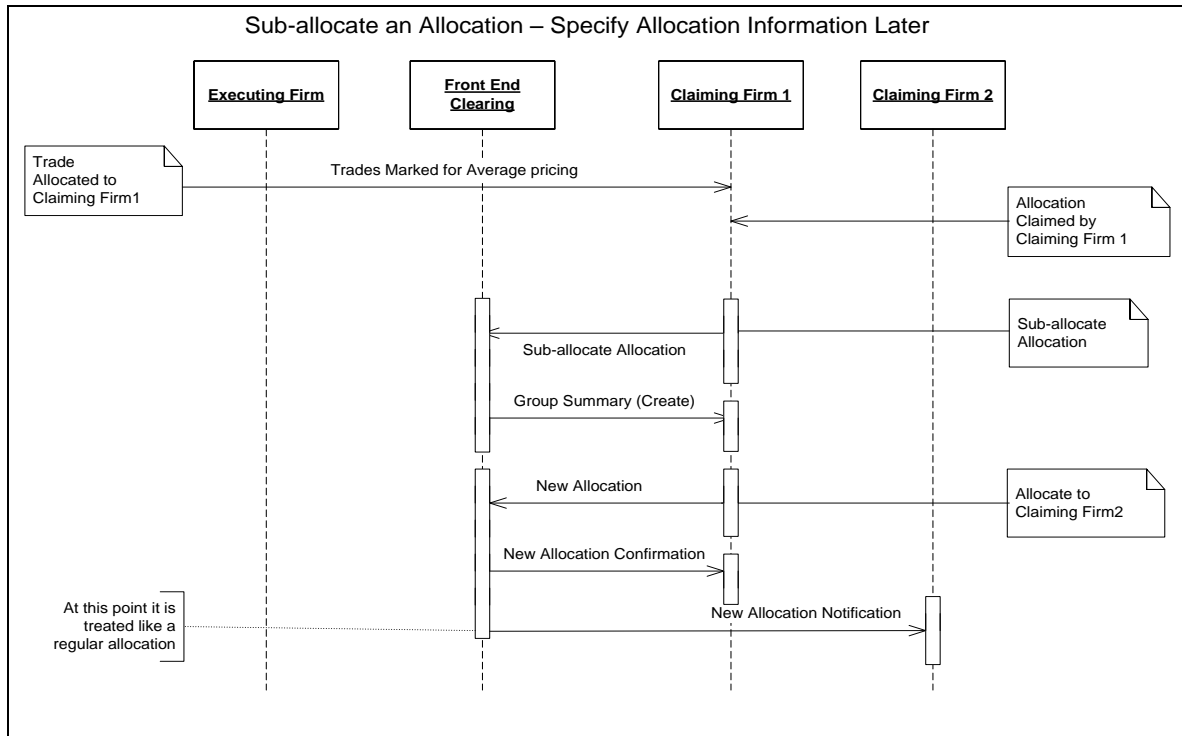
2.3.1 Sub-allocating Allocations

Scenario 1: Sub-allocating and specifying allocation instructions later

This scenario begins with the executing firm allocating a trade to claiming firm 1, which claims the allocation:

1. Claiming firm 1 marks the allocation for sub-allocation.
2. The clearing system sends a group summary for the newly created give-up group to claiming firm 1.
3. Claiming firm 1 submits allocation instructions, allocating the group to claiming firm 2.
4. The clearing system acknowledges the allocation to claiming firm 1 and notifies claiming firm 2 of the allocation.

Next, this scenario transitions to the claim workflow where the claiming firm 2 can claim or refuse the allocation.

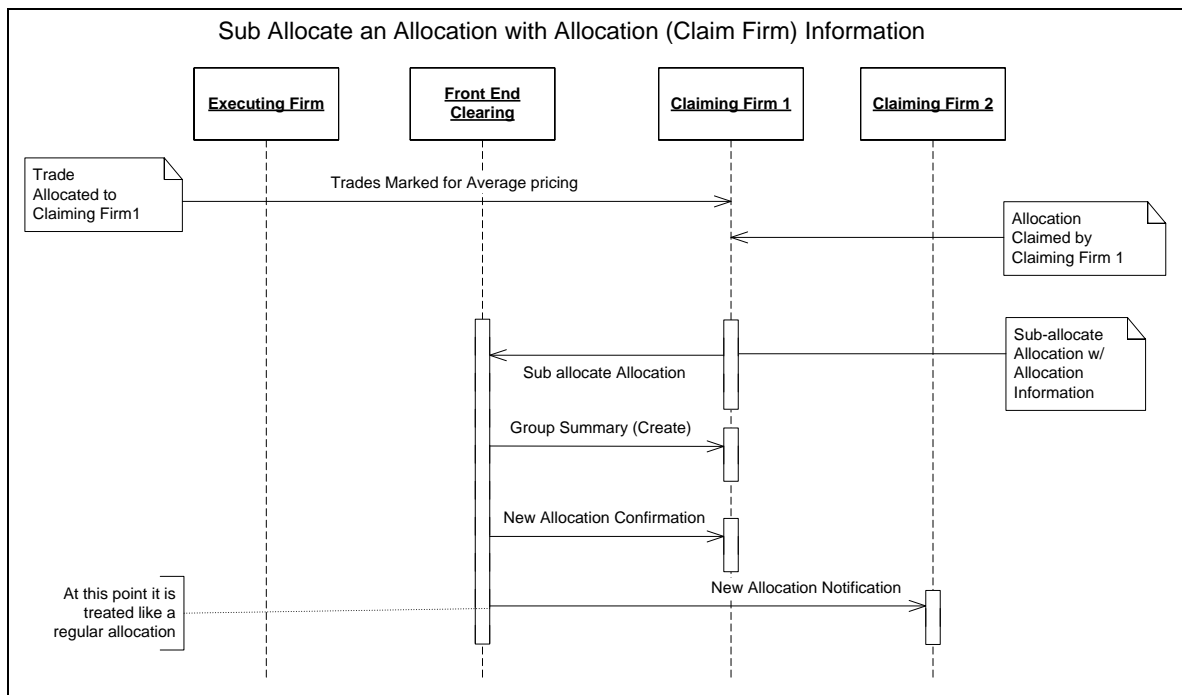


Scenario 2: Sub-allocating with allocation instructions

This scenario begins with the executing firm allocating a trade to claiming firm 1, which claims the allocation:

1. Claiming firm 1 marks the allocation for sub-allocation and includes allocation information.
2. The clearing system:
 - Sends a group summary for the newly created give-up group to claiming firm 1.
 - Acknowledges the claiming firm 1 of the new allocation.
 - Notifies the claiming firm 2 of the new allocation.

This scenario transitions to the claim workflow where the claiming firm 2 can claim or refuse the allocation.

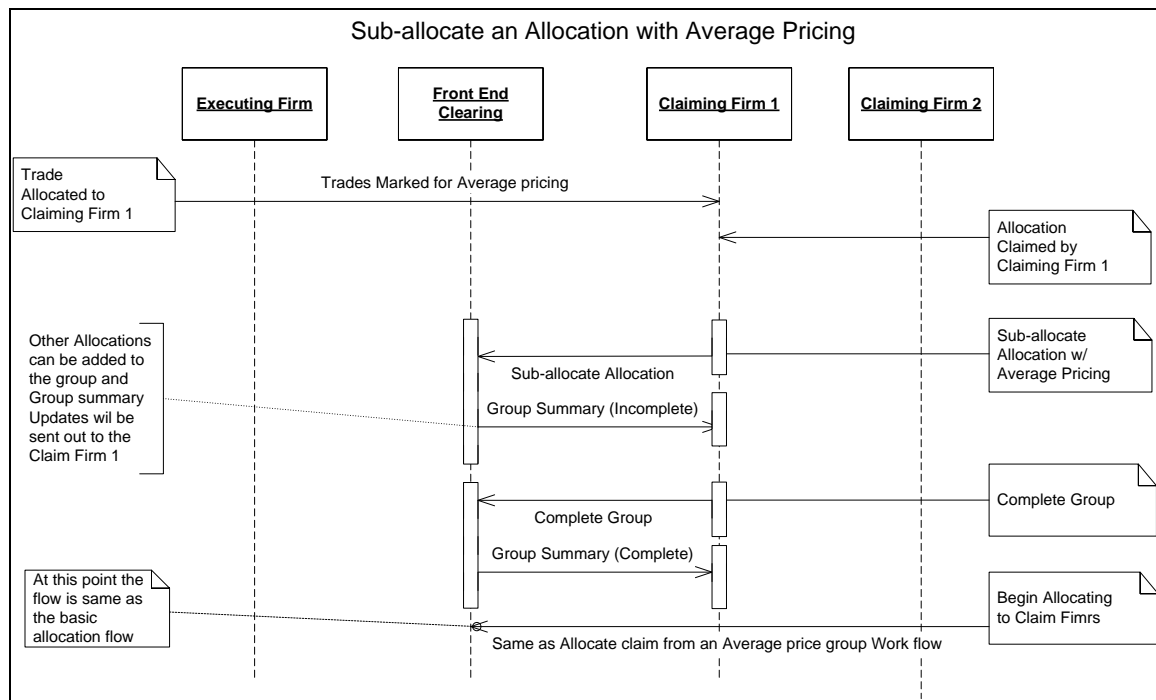


2.3.2 Sub-allocation and Average Pricing Allocations

This scenario begins with the executing firm allocating a trade to claiming firm 1, which claims the allocation:

1. Claiming firm 1 marks the allocation for sub-allocation, specifying an average price group.
2. The clearing system sends a group summary for the newly created average price group. Alternatively, if a group is already created, the allocation is added to the group.
3. Claiming firm 1 completes the average price group.
4. The clearing system confirms the claiming firm 1 with a group summary.
5. Claiming firm 1 submits allocation instructions, allocating the group to claiming firm 2.
6. The clearing system acknowledges the allocation to claiming firm 1 and notifies claiming firm 2 of the allocation.

This scenario transitions to the claim workflow where the claiming firm 2 can claim or refuse the allocation.



2.3.3 Sub-allocation Modification and Cancellation

Sub-allocations behave similarly to normal allocations. Once a sub-allocation is submitted, it can be replaced or cancelled if the allocation is not claimed (for give up allocation) or the group is not complete (for average price allocation). However, unlike trades, sub-allocations for average pricing must always specify an average price group ID. They cannot be un-marked from an average pricing group and remain unassigned in the average pricing system.

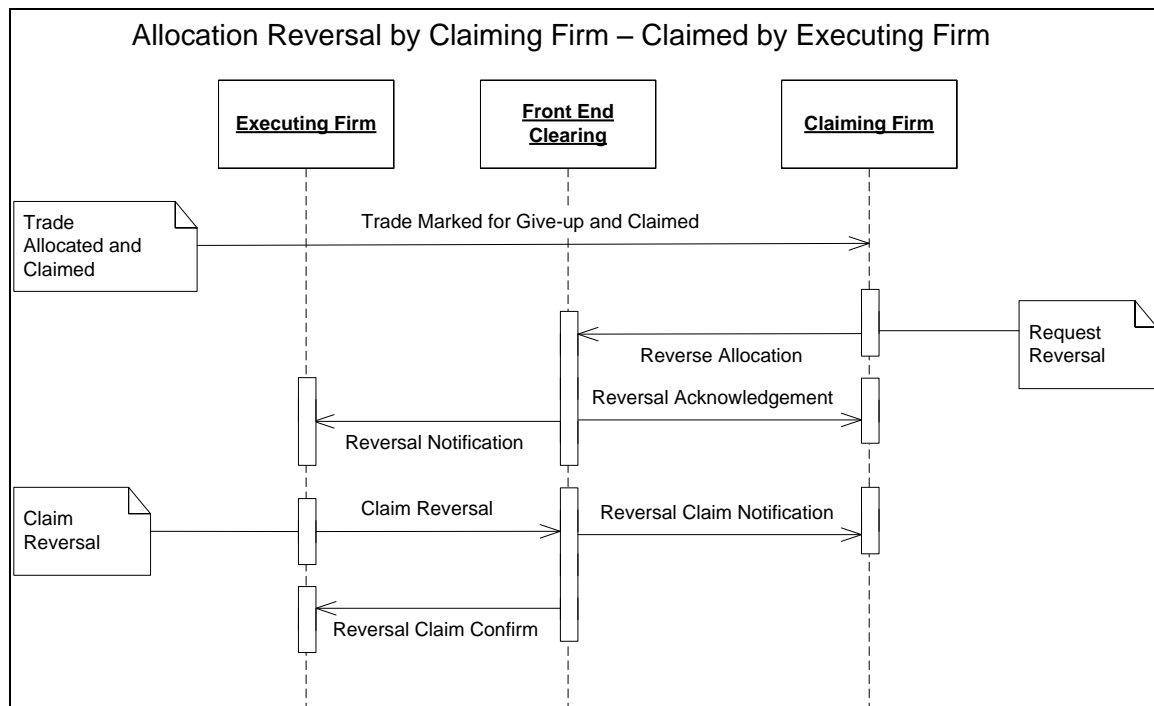
2.4 Reversal of Accepted Allocations

Reversal is a process by which either firm (executing or claiming) can request to back out of an allocation. The reversal request goes through the claim work flow where the respondent is notified of the reversal request. When a reversal is complete, the allocation goes into a reversed status. An initiator of the reversal can also cancel the request before it is claimed.

2.4.1 Claiming Firm Requests Reversal – Claimed by Executing Firm

In this scenario, the executing firm gave up a trade to a claiming firm and the claiming firm has claimed it. The claiming firm now requests to reverse the allocation:

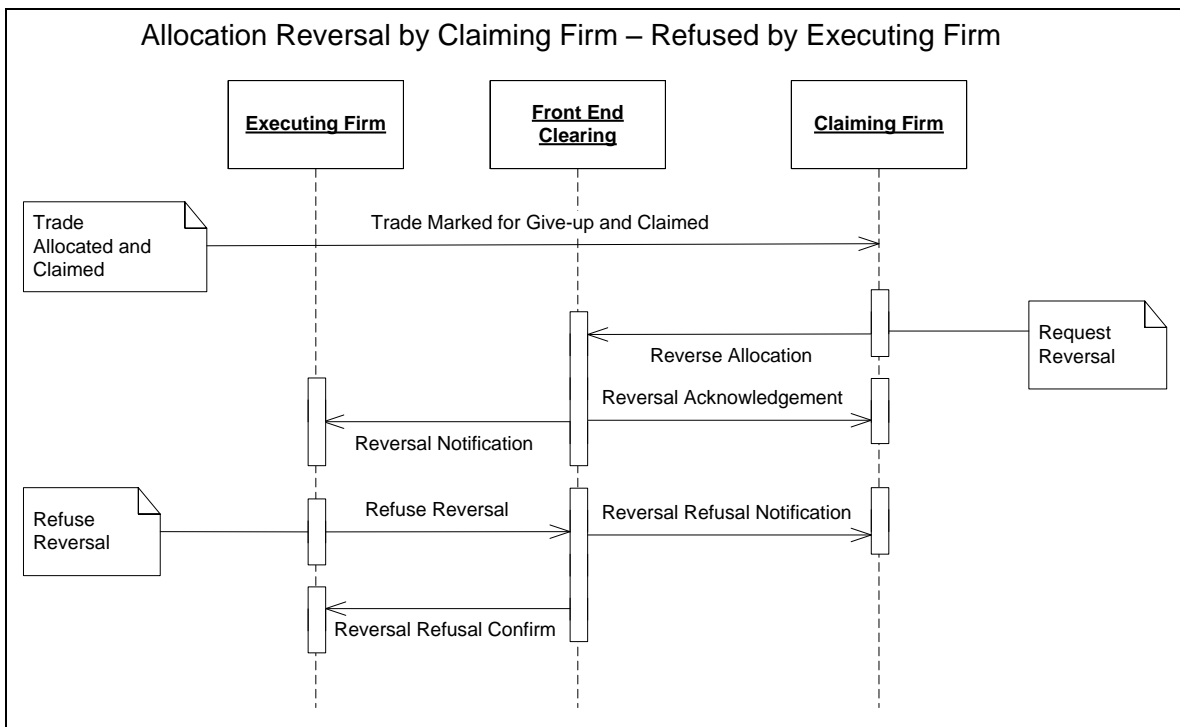
1. The claiming firm requests a reversal.
2. The clearing system:
 - Acknowledges receipt of the request to the claiming firm
 - Notifies the executing firm of the reversal request.
3. The executing firm accepts the reversal.
4. The clearing system:
 - Acknowledges the acceptance of the reversal to the executing firm.
 - Notifies the claiming firm of the accepted reversal.



2.4.2 Claiming Firm Requests Reversal – Refused by Executing Firm

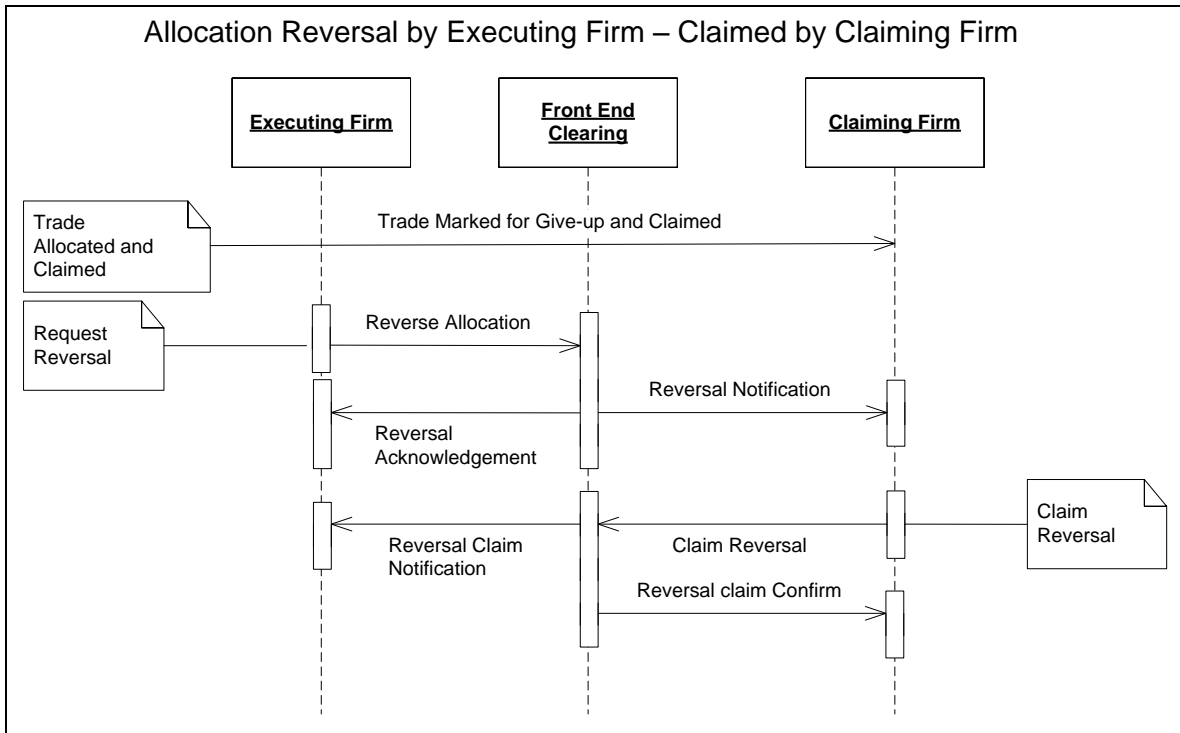
In this scenario, the executing firm gave up a trade to a claiming firm and the claiming firm has claimed it. The claiming firm now requests to reverse the allocation:

1. The claiming firm requests a reversal.
2. The clearing system:
 - Acknowledges receipt of the request to the claiming firm
 - Notifies the executing firm of the reversal request.
3. The executing firm refuses the reversal.
4. The clearing system:
 - Acknowledges the refusal of the reversal to the executing firm.
 - Notifies the claiming firm of the refused reversal.



2.4.3 Executing Firm Requests Reversal

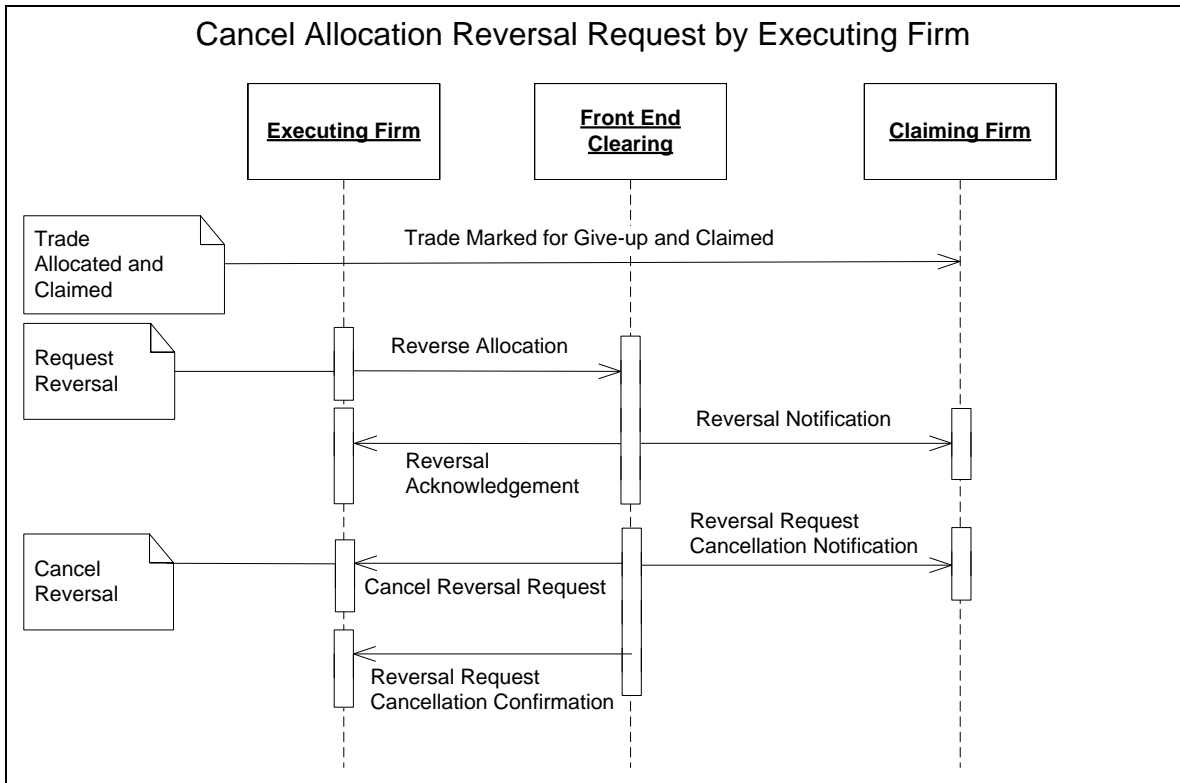
This scenario is the same as [2.4.1](#). In this case the reversal request is initiated by the executing firm instead of the claiming firm, and then claimed by the claiming firm.



2.4.4 Initiator of the Reversal Request Cancels the Request

In this scenario, the executing firm gave up a trade to a claiming firm, and the claiming firm has claimed it. The claiming firm now requests to reverse the allocation:

1. The claiming firm requests a cancel of the reversal.
2. The clearing system:
 - Acknowledges to the claiming firm that the reversal has been cancelled.
 - Notifies the executing firm of the reversal cancellation.



2.5 Cross-exchange Give-up Allocation

This section describes the interface for clearing firms to allocate trades to firms that trade in another exchange and claim trades allocated by a firm trading at another exchange. These are referred to as cross-exchange give-ups. Currently, this API only supports cross-exchange give-ups to exchanges that are part of the Mutual Offset Agreement. All references to a cross-exchange or a cross-exchange firm in this document imply SGX and SGX firms respectively.

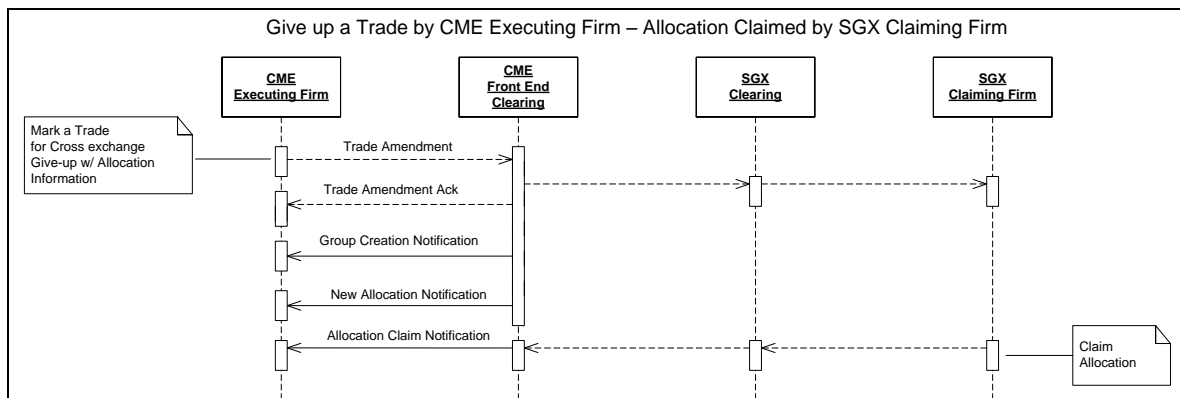
Cross-exchange give-up functions are almost identical to give-up allocations, except that one of the firms, either executing or claiming, belongs to another exchange. This section describes two basic cross-exchange allocation scenarios. Further scenarios are similar to give-up allocation. Differences between cross-exchange give-up and give-up allocation are illustrated in this section and in the API Submission and Usage Rules section. Average price allocation is not supported for cross-exchange allocation.

2.5.1 CME Executing Firm Allocates Trade to SGX Firm; SGX Firm Claims

In this scenario, a CME executing firm marks a trade for give-up specifying allocation instructions. The SGX claiming firm claims the allocation:

1. The CME executing firm either submits a new trade or amends a previously submitted trade with an indicator marking it for give-up and includes allocation information to an SGX firm.
2. The CME clearing system:
 - Acknowledges the trade submission or amendment.
 - Creates a give-up allocation group and notifies the executing firm.
 - Notifies the executing firm of the new allocation.
 - Notifies SGX clearing of the new allocation.
3. SGX clearing notifies the CME Clearing system of the claim.
4. The CME Clearing system notifies the executing firm of the claim.

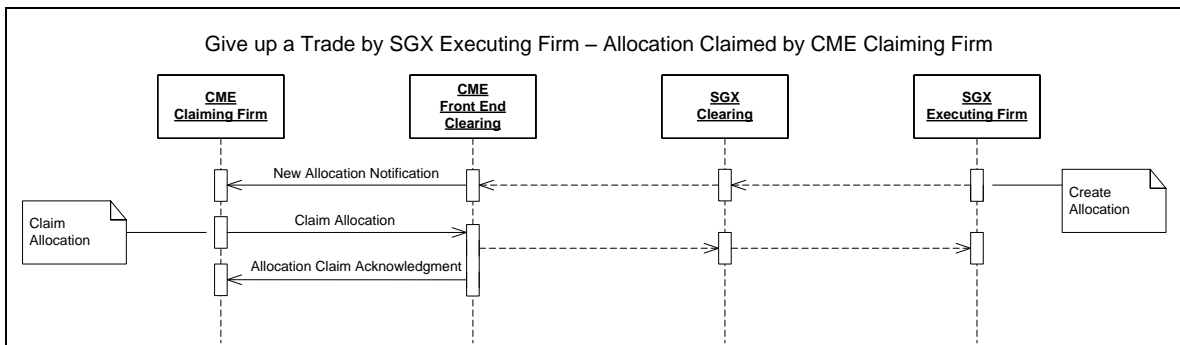
Note: The interactions between SGX clearing and the SGX claiming firm are outside the scope of this document.



2.5.2 SGX Executing Firm Allocates Trade to CME Firm; CME Firm Claims

In this scenario, an SGX executing firm allocates a trade to a CME claiming firm. The CME claiming firm claims the allocation:

1. The SGX clearing system notifies the CME Clearing system of the allocation when an SGX firm allocates a trade to a CME firm.
2. The CME Clearing system notifies the CME claiming firm of a new allocation.
3. The CME claiming firm claims the allocation.
4. The CME Clearing system:
 - Notifies the SGX clearing system of the claim.
 - Confirms the claim to the CME claiming firm.



2.5.3 CME Executing Firm Cancels an Allocation – Pre-claim

The CME executing firm can cancel an allocation pre-claim.

- If the SGX firm has claimed the allocation prior to receiving the cancel, the CME Clearing system responds as if the allocation were claimed and ignores the cancel.
- If the SGX firm refused the allocation prior to receiving the cancel, the CME Clearing system responds as if the allocation were refused and ignores the cancel.

2.5.4 CME Claim Firm Reverses an Accepted Allocation

The CME firm may initiate a reversal of an accepted allocation, and the message flow is the same as for reversal of a give-up allocation.

Note: The API between CME Group and SGX does not currently allow an SGX firm to reverse or release an accepted allocation. Cancellation of reversal is not currently supported.

3.0 Revision History

Version	Date	Author	Description
1.0	3/05	NS	Initial version of the document.
2.0	1/4/12	RP/JJ	Re-write of the document to use FIX 5.0 SP2.
2.3	3/26/13	RP	Added " Claiming Firm Amends an Allocation – Pre-claim " scenario.