

Direct to Freddie Exchange

Solicited Workflow via Tradeweb

This document contains the technical FIX details around integrating with Tradeweb specifically for the Freddie Exchange. This is a higher level document that will supplement the standard FIX specification. *This document is subject to change.

Version	Date	Comment
1.0	12/2018	Initial Draft

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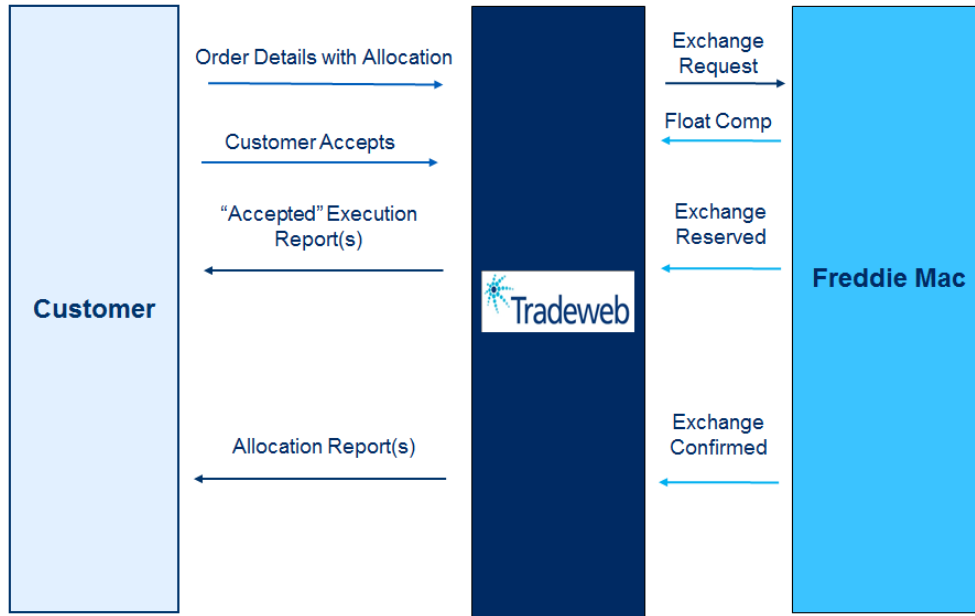
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PRE-ALLOCATED ON TRADEWEB - WORKFLOW OPTIONS

OVERVIEW

- Clients will send over the order details to Tradeweb with pre-allocations.
- The exchange will be executed over Tradeweb.



OPTION A: NEW ORDER (SINGLE SIDED): PRE-ALLOCATED ON TW

- Client will send over a solicited New Order Message (35=D) for the 45 day security with pre-allocations. The 45 will be matched with a 55 day security on the Tradeweb viewer.
- On the solicited 45 Day Security, we will send the ER & Allocation Report with reference to original client order id.
- On the 55 day Security done on the viewer, we will send an Unsolicited ER & Allocation Report (35=AS).

OPTION B: NEW ORDER (DOUBLE SIDED): PRE-ALLOCATED ON TW

- Client will send over two solicited New Order Messages (35=D) for the 45 day security & 55 day security with pre-allocations.
- We will return the ER & Allocation Reports with reference to original client order id.

OPTION C: MULTI-LEG ORDER: PRE-ALLOCATED ON TW

- Client will send over one Multi-Leg Order Messages (35=AB) for the 45 day security & 55 day security with pre-allocations.
- We will return the ER & Allocation Reports with reference to original client order id.

OPTION D: LIST OF 45 DAY SECURITIES: PRE-ALLOCATED ON TW

- Client will send over a solicited List Message (35=E) for the 45 day security with pre-allocations. The 45 day securities will be matched with 55 day securities on the Tradeweb viewer.
- On the solicited 45 Day Security, we will send the ER & Allocation Report with reference to original client order id.
- On the 55 day Security done on the viewer, we will send an unsolicited ER & Allocation Report.

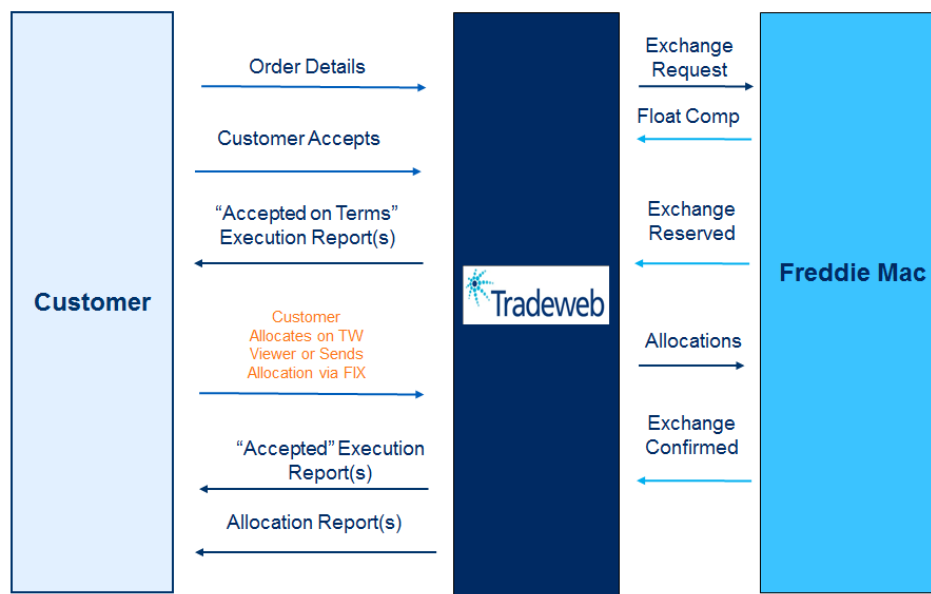
OPTION E: LIST OF EXCHANGES: PRE-ALLOCATED ON TW

- Client will send over a List (35=E) of 45 day securities & 55 day securities with pre-allocations.
- We will return the ER & Allocation Reports with reference to original client order id.

POST-ALLOCATED ON TRADEWEB - WORKFLOW OPTIONS

OVERVIEW

- Clients will execute the trade on Tradeweb.
- Once the terms are agreed to, it is "Accepted Terms". It is not complete until allocated.
- Clients can allocate post trade on TW via two options: a.) solicited allocation instruction or b.) directly on the viewer.
- Once allocated, the exchange will be completed.



OPTION A: NEW ORDER SINGLE (SINGLE SIDED): POST TRADE ALLOCATED ON TW

- Client will send over a solicited New Order Message (35=D) for the 45 day security. The 45 will be matched with a 55 day security on the Tradeweb viewer.
- On the solicited 45 Day Security, we will send an "Accepted on Term" ER with reference to original client order id.
- On the 55 day Security done on the viewer, we will send an "Accepted on Term" ER.
- Once the trade is allocated, we will send an "Accepted" ER for the 45 day Security with reference to the original client order ID, and the 55 day security.
- Post Execution Report, we will send the Allocation Report.

OPTION B: NEW ORDER SINGLE (DOUBLE SIDED): POST TRADE ALLOCATED ON TW

- Client will send over two solicited New Order Messages (35=D) for the 45 day security & 55 day security.
- On the solicited 45 Day Security & 55 Day Security, we will send 2 "Accepted on Term" ERs .
- Once the trade is allocated, we will send 2 "Accepted" ERs, one for the 45 day Security, and one for the 55 day security.
- Post Execution Report, we will send the Allocation Report.

OPTION C: MULTI-LEG ORDER: POST TRADE ALLOCATED ON TW

- Client will send over one Multi-Leg Order Messages (35=AB) for the 45 day security & 55 day security.

- On the solicited 45 Day Security & 55 Day Security, we will send 2 “Accepted on Term” ERs .
- Once the trade is allocated, we will send 2 “Accepted” ERs, one for the 45 day Security, and one for the 55 day security.
- Post Execution Report, we will send the Allocation Report.

OPTION D: LIST OF 45 DAY SECURITIES: POST TRADE ALLOCATED ON TW

- Client will send over a solicited List Message (35=E) for the 45 day security. The 45 day securities will be matched with 55 day securities on the Tradeweb viewer.
- On the solicited 45 Day Security, we will send an “Accepted on Term” ER with reference to original client order id.
- On the 55 day Security done on the viewer, we will send an “Accepted on Term” ER.
- Once the trade is allocated, we will send an “Accepted” ER for the 45 day Security with reference to the original client order ID, and the 55 day security.
- Post Execution Report, we will send the Allocation Report.

OPTION E: LIST OF EXCHANGES: POST- TRADE ALLOCATED ON TW

- Client will send over a List (35=E) of 45 day securities & 55 day securities.
- On the solicited 45 Day Security & 55 Day Security, we will send 2 “Accepted on Term” ERs .
- Once the trade is allocated, we will send 2 “Accepted” ERs, one for the 45 day Security, and one for the 55 day security.
- Post Execution Report, we will send the Allocation Report.

SOLICITED FIX INTEGRATION GUIDELINES

How can I integrate with the Freddie Exchange over Tradeweb?

- Tradeweb offers full integration via FIX 4.4. The Freddie Exchange will be supported over the existing FIX connectivity, with the addition of new tags and values to identify this new functionality.
- Tradeweb supports both solicited and unsolicited trading.

Do I need a new FIX connection for the Freddie Exchange?

- No, this is not required. You can commingle normal trading activity alongside your Freddie Exchange activity. However, if you decide to do this, you will need to include an additional FIX tag to inform us that this is an exchange.
- Standalone "Exchange" FIX connections are available if needed.

What are the solicited FIX message types supported?

- SOLICITED ORDER OPTIONS:
 - NEW ORDER SINGLE (35=D)
 - SINGLE SIDE - 45 DAY "SELL" SECURITY (55 WILL BE PAIRED MANUALLY ON TW)
 - BOTH SIDES - 45 DAY "SELL" SECURITY, AND 55 DAY "BUY SECURITY"
 - MULTI-LEG ORDER (35=AB)
 - SINGLE MESSAGE CONTAINING BOTH THE 45 DAY SECURITY, AND 55 DAY SECURITY
 - LIST (35=E)
 - LIST OF 45 DAY "SELL" SECURITIES
 - LIST OF EXCHANGES – 45 DAY "SELL" SECURITIES VERSUS 55 DAY "BUY SECURITIES"

Where can I access the orders sent to TW via FIX?

- It will always go to the Tradeweb LIST screen
- If you send a 35=D or 35=AB message, it will hit the OMS Default List. Here, you can send one list with multiple line item combinations.
- If you send a 35=E message (list message), it will create a new list and reference that name of the list that you send in via FIX.

How does TW know that an inbound solicited order is a Freddie Exchange?

- **Option A:** Client can send indicate this on the FIX order message via the TW Instruction (tag 22632). There will be a new value to flag this.
- **Option B:** Client can indicate this on the FIX order message by specifying the Freddie Broker Code.
- **Option C:** We can set up a standalone FIX channel for exchanges, whereby anything coming over this channel will be considered an exchange.
- **Option D:** If this is sent to TW excluding the TW Instruction (tag 22632), or outside of a unique FIX channel, it will hit our standard spec pool screen on the LIST. From here, a client can manually move it over to our exchange screen.

How can I allocate?

- Pre-Trade on Tradeweb
- Post-Trade on Tradeweb
 - Client can send over a solicited allocation instruction (35=J message) to allocate
 - Client can allocate directly over the Tradeweb viewer
 - In both TW allocation instances, we will send back an allocation report (35=AS message)
- Away from Tradeweb – on OASYS

What the FIX messages for clients allocating directly on Tradeweb?

- ALLOCATION OPTIONS:
 - ALLOCATE PRE-TRADE - (ALLOCATIONS PROVIDED IN ALL PRE-TRADE ORDER TYPES REFERENCED ABOVE)
 - POST TRADE ALLOCATE
 - SEND TO TRADEWEB VIA FIX (35=J) (solicited allocation)

- SEND MANUALLY ON TW SCREEN
- ALLOCATION REPORT RETURNED IN ALL SCENARIOS VIA FIX (35=AS)

Can I allocate away from Tradeweb?

- Yes, TW will support post trade allocations over OASYS.
- TW will have direct connectivity to retrieve the allocations.
- Once allocated on OASYS, TW will provide an Allocation Report over the preexisting FIX channel (35=AS).

Will TW provide a tag to indicate this is an “exchange” on the Execution Report?

- Trade Event (tag 7024) will be used post trade to indicate an “exchange” on the execution report. Value 19 is a new value to indicate this is an exchange.
- Freddie Exchange ID (tag 23506) will be provided to Tradeweb, and populated on the allocation report in a repeating group at the individual account level on the allocation report.
- This will be a new unique product on TW (value TBD), and referenced as such in the security type field (tag 167).

If I send both a solicited SELL- 45 & BUY- 55 day security pre-trade, how do I tie this together?

- If using the MultiLeg New Order Message (35=AB), this will tie the two sides together.
- If sending a New Order Single Buy & New Order Single Sell, then it is mandatory to include the Orderlink ID (tag 5975) to tie the two instruments together.
- If sending the List message (35=E), and commingling buys and sells, then it is mandatory to include the Orderlink ID (tag 5975) to tie the two instruments together.
- In all instances, the Tradeweb UI will validate that the pair is a proper match suitable available to exchange.

How do I tie together the execution reports?

- Secondary Order ID (tag 198) will be used to tie the 45 & 55 day transaction together on the Execution Reports

What happens if I send buy & sell cusips that are not suitable to exchange?

- Tradeweb will allow this to come through via FIX without rejecting this.
- The Tradeweb viewer will do validation that would prevent the user from sending this out to Freddie as an exchange.
- The user will need to delete this from the Exchange screen, which will send back a cancel to their OMS.

What happens if I send buy & sell cusips for exchange with mismatched allocations?

- On an exchange, the allocations on the buy & sell need to match.
- If a client pre-allocates via FIX, Tradeweb will still allow this to come through via FIX without rejecting this. The Tradeweb viewer will do validation that will prevent the user from sending this out to Freddie as an exchange, and will require the accounts to be amended.
- If a client post-allocates via FIX (35=J), Tradeweb will reject this over FIX if it's mismatched. Orderlink ID (tag 5975) is a required field in this instance to ensure that Tradeweb can validate that the account information in both allocation instructions match.

How do I tie back the allocation to the execution report?

- For Trades Allocated on Tradeweb, Exec ID (tag 17) will tie the allocation report back to the execution report

Where can I find the Float Compensation?

- Float Compensation (tag 23521), which will be sent on the Execution Report & in the Allocation Report in a repeating group.
- Float compensation will only appear on the 55, and not the 45.

What is an Exchange ID? Where can I find this?

- Exchange ID is provided after an Exchange is completed.
- For clients allocating, we will provide the exchange ID at the actual allocation/ account level. Therefore, an exchange is not completed until a trade is allocated. Exchange ID (tag 23506) will be sent in a repeating group on the Allocation Report. Each Allocation will have a unique exchange ID.
- For clients that are not allocating, we will provide the exchange ID (tag 23506) on the execution report.

Where can I find a full set of FIX tags, and sample messages?

- Please refer to our master FIX spec for a full list of all FIX tags, and sample messages.
- TW will also provide a data dictionary inclusive of all FIX tags.