



## EXCHANGE AUDIT TRAIL REQUIREMENTS: FREQUENTLY ASKED QUESTIONS

**NFX Website:** [business.nasdaq.com/futures](https://business.nasdaq.com/futures)

### **1: What are the audit trail requirements with Direct Access?**

Pursuant to Chapter V, Section 4, Clearing Futures Participants authorizing a connection to the Trading System are responsible for maintaining or causing to be maintained the audit trail for all Orders submitted to NFX; and producing, upon request by NFX or its Regulatory Services Provider, the audit trail for all Orders submitted to NFX by an Authorized Customer. Each Authorized Customer connecting to the Trading System is responsible for maintaining or causing to be maintained the audit trail for all Orders submitted to NFX. A Clearing Futures Participant that has arrangements for a third party to maintain audit trail information on its behalf shall remain responsible for compliance with NFX audit trail rules.

### **2: How long must the audit trail be maintained?**

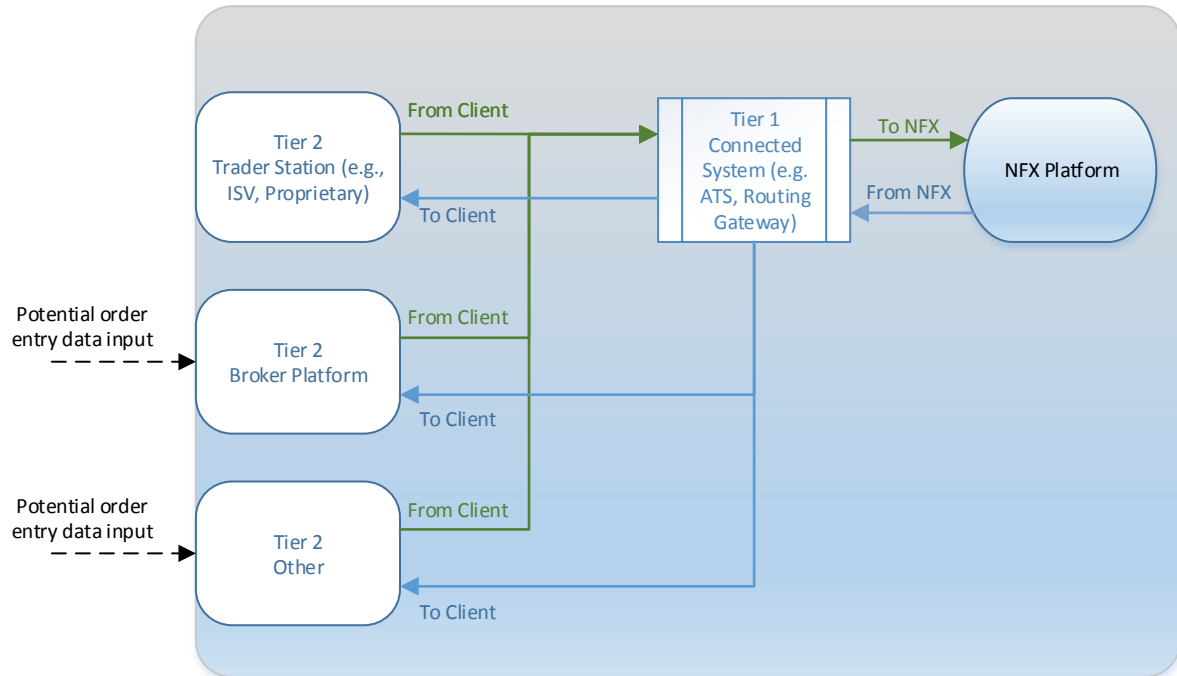
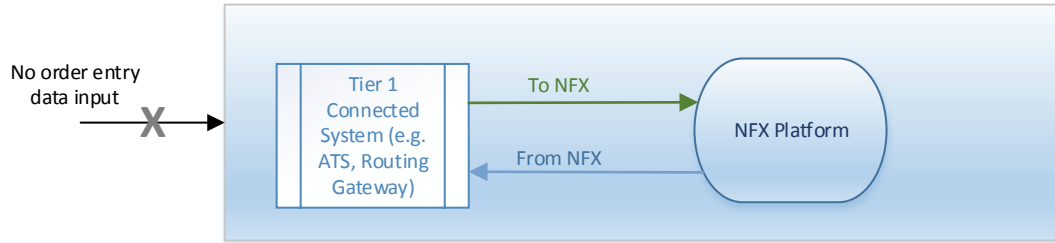
All Electronic audit trails must be maintained for a minimum of five (5) years. Upon the request of NFX, each Futures Participant, Clearing Futures Participant and Authorized Customer must have the ability to produce to NFX the audit trail data in a format prescribed by NFX.

### **3: How should Bunched Orders be reported?**

Pursuant to Chapter V, Section 12, for post-execution allocation of a Bunched Order, a Futures Participant acting as an Eligible Account Manager (as defined by Commission regulation 1.35(b)(5)), need not provide, at the time of either Order entry or report of Order execution, specific Customer Account identifiers for accounts included in a Bunched Order, if the Futures Participant complies with the requirements of Commission regulation 1.35(b)(5), as applicable. A Futures Participant that executes Bunched Orders or carries accounts eligible for post execution allocation of Bunched Orders must maintain records that, as applicable, identify each Bunched Order subject to post-execution allocation and the accounts to which Contracts executed for the Bunched Order were allocated, as required by Commission regulation 1.35(b)(5).

### **Audit Trail Tier 1 and Tier 2 Architecture**

The following diagram depicts the scope of the audit trail responsibilities according to Tier 1 and Tier 2 architectural classifications.



**Minimum Acceptable Audit Trail Elements – Data Definitions and Validation Rules**

If the audit is for a Tier 1 participant, one of two options can be utilized to provide requested audit trail data.

Option A) Raw FIX format

Option B) CSV or Excel Format

If the audit is for a Tier 2 participant, only the CSV or Excel Format is allowed.

This table describes the front-end audit-trail specifications required to represent data exchanged between a trading system and NFX in your front-end audit trail. The data must be captured in .csv or Excel format.

The order of the columns must be followed in the file submission. Additional columns may be added at the end of the file for internal use by the firm. The layout includes the FIX Tag where applicable/available and is provided for reference only.

Specifications representing each message type supported on NFX are available in this section. For further description of data elements to capture in Tier 1, please refer to the FIX specification posted on Nasdaq Futures, Inc. website found here:

<http://business.nasdaq.com/nasdaq-futures/connectivity>

**Blank table cell = Not Applicable**

Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
1	SendingTimestamps	52	<p>Time at which the message/data leaves the Tier 1 component and is sent to the NFX platform.</p> <p>The time stamp must be in UTC Timestamp format (YYYYMMDD-HH:MM:SS.sss) and must have at least millisecond precision.</p>	<p>Time at which the message/data leaves the Tier 1 component towards the Tier 2 component.</p> <p>The time stamp must be in UTC Timestamp format (YYYYMMDD-HH:MM:SS.sss) and must have at least millisecond precision.</p>	
2	ReceivingTimestamps		<p>Time at which the message/data is received by the Tier 1 component and is sent to the NFX platform.</p> <p>The time stamp must be in UTC Timestamp format (YYYYMMDD-HH:MM:SS.sss) and must have at least millisecond precision.</p>	<p>Time at which the message/data is received by the Tier 1 component towards the Tier 2 component.</p> <p>The time stamp must be in UTC Timestamp format (YYYYMMDD-HH:MM:SS.sss) and must have at least millisecond precision.</p>	

Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
3	MessageDirection		<p>Explicit labeling of the direction of the captured message.</p> <p>"TO NFX": for messages leaving Tier 1 component towards the NFX platform</p> <p>"FROM NFX" : for messages received by Tier 1 component from the NFX platform</p>	<p>Explicit labeling of the direction of the captured message.</p> <p>"TO CLIENT": for messages/data leaving the Tier 1 component towards the Tier 2 component.</p> <p>"FROM CLIENT": for messages/data received by the Tier 1 component from the Tier 2 component.</p>	'TO NFX' 'FROM NFX' 'TO CLIENT' 'FROM CLIENT'
4	SenderSubID	50	<p>TraderID = The unique personal identification code issued by the Exchange and entered into the Trading System to identify the Authorized Trader, Authorized Customer or Automated System submitting an Order.</p>	<p>Identifier of the operator who submitted the message or is responsible for its submission.</p>	
5	AccountNumber	1	<p>Trading account number</p>	<p>Trading account number</p>	
6	SenderCompID	49	<p>As specified in separate agreement, combined with TargetCompID used to identify a session.</p>		

Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
7	TargetCompID	56	As specified in separate agreement, combined with SenderCompID used to identify a session.		
8	ExecutingFirmID	Party role 452	Identifier of the Executing Trading Firm submitting the messages on behalf of Party ID 448 to NFX.		1=Firm 4=ClearingFirm 11=Order Originating Trader 14=ClearingFirm
9	MessageType	35	Identifies the type of the message captured.	Identifies the type of the message captured.	3=Reject 5=Logout 8=ExecutionReport 9=OrderCancelReject A=Logon D=New Order E=NewOrder-List F=OrderCancelRequest G=OrderCancelReplace R=Quote Request
10	OrderCapacity	528	Type of business conducted (Agency or Principal).		A=Agency P=Principal
11	CustOrderCapacity	582	Capacity of customer placing the order		1=Member trading for their own account 2=Clearing Firm trading for its proprietary account 3=Member trading for another member 4=Other
12	ExecID	17	Execution Report identifier, a unique identifier per FIX session that is assigned by NFX.		

Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
13	MessageLinkID		<p>Identifier linking message/data sent from the Tier 2 component to Tier 1 component to NFX and from NFX to Tier 1 component to Tier 2 component.</p> <p>This ID must be generated as part of the audit trail; it is not part of the data captured.</p> <p>This identifier may link 1:1, 1:N or N:1 messages between tier 1 and tier 2.</p>	<p>Identifier linking message/data sent from the Tier 2 component to Tier 1 component to NFX and from NFX to Tier 1 component to Tier 2 component.</p> <p>This ID must be generated as part of the audit trail; it is not part of the data captured.</p> <p>This identifier may link 1:1, 1:N, or N:1 messages.</p>	
14	OrderFlowID		<p>Identifier linking all inbound and outbound messages associated with a New Order Messages.</p> <p>This ID must be generated as part of the audit trail; it is not part of the data captured.</p> <p>This ID is not required for Mass Quote related messages.</p>	<p>Identifier linking all inbound and outbound messages associated with a New Order Messages.</p> <p>This ID must be generated as part of the audit trail; it is not part of the data captured.</p> <p>This ID is not required for Mass Quote related messages.</p>	
15	ListID	66	<p>Identifier assigned by NFX to legs and spread fill notices and spread trade cancellation to link the linked order messages together.</p>		

Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
16	ExecType	150	Type of execution defined by NFX		0=New 4=Canceled 5=Replaced 8=Rejected D=Restated F=Trade G=Trade Correct H=Trade Cancel
17	Instrument/SecurityID/OrderBookID	48	NFX - assigned code to uniquely identify a futures or options contract.	Code uniquely identifying futures or options contracts between Tier 1 and Tier 2 components.	Exchange Orderbook ID of Instrument
18	Instrument/Symbol	55	Short name for the security		
19	ClientOrderID	11	Client-generated identifier uniquely identifying an order, a cancel or cancel replace message. This is unique per trading session.	Client-generated identifier uniquely identifying an order, a cancel or cancel replace message.	
20	OrderID	37	NFX - assigned code uniquely identifying an order. OrderIDs are unique per orderbook and side. This code does not change regardless of the changes applied to it.		OrderID in Hex format
21	Side	54	Side of the order.	Side of the order as defined between Tier 1 and Tier 2 component.	1=Buy 2=Sell
22	Quantity	38	Quantity of the order.	Quantity of the order as defined between Tier 1 and Tier 2 component.	

Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
23	LastQty	32	Quantity (shares) bought/sold on the last fill.		
24	LimitPrice	44	Limit price of the order.	Limit price of the order as defined between Tier 1 and Tier 2 component.	
25	TriggerPrice	1102	Trigger price of the order.	Trigger price of the order as defined between Tier 1 and Tier 2 component.	
26	OrdType	40	Type of the order: market, limit, market with left over as limit.	Type of the order as defined between Tier 1 and Tier 2 component.	1=Market 2=Limit K=Market with left over as limit
27	TimeInForce	59	Time in force of the order: Day, GTC, IOC, FoK, GTD	Time in force of the order as defined between Tier 1 and Tier 2 component.	0=Day 1=GTC 3=IOC 4=FOK 6=GTD
28	MaxFloor	111	The maximum order quantity shown in the public Market Data.	Display quantity of an order to be shown in the order book at any given time.	
29	MinQty	110	Minimum quantity of a quote to be executed	Minimum quantity of a quote to be executed.	
30	CountryOfOrigin		Location of the operator.	Location of the operator.	
31	FillPrice	31	Price at which the order has been executed.	Price at which the order has been executed.	



Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
32	OrderQtyData/OrderQty	38	Quantity at which the order has been executed.	Quantity at which the order has been executed.	
33	CumQty	14	Cumulated fill quantity for the order.	Cumulated fill quantity for the order.	
34	LeavesQty	151	Quantity open for further execution.	Quantity open for further execution.	
35	AggressorIndicator	1057	Flag indicating whether the order was the aggressor in the match.	Flag indicating whether the order was the aggressor in the match.	Y=Party is the aggressor N=Party is passive
36	OrdStatus	39	Status of order	Status of order	0=New 1=Partial Fill 2=Full Fill 4=Canceled 8=Rejected 9=Suspended C=Expired
37	RejectReason	58	Code or text identifying the reason why an order was rejected.	Code or text identifying the reason why an order was rejected.	Free-Form Text
38	NoQuoteEntries	295	Number of double-sided quotes successfully acknowledged or cancelled.		
39	CrossID	548	Customer-generated code uniquely identifying an order Cross (RFC).		
40	QuoteID	117	Customer-generated code uniquely identifying a Request for Quote (RFQ).		

Position	Field Name	FIX Tag	TO/FROM NFX	TO/FROM CLIENT	FORMAT/PERMISSABLE VALUES
41	QuoteSetID	302	Customer-generated code uniquely identifying a Mass Quote message.		
42	QuoteEntryID	299	Customer-generated code uniquely identifying a Quote in a Mass Quote message.		
43	BidPx	132	Bid price of quote.	Bid price of quote.	
44	BidSize	134	Bid quantity of quote.	Bid quantity of quote.	
45	OfferPx	133	Offer price of quote.	Offer price of quote.	
46	OfferSize	135	Offer quantity of quote.	Offer quantity of quote.	
47	TrdMatchID	880	Trade ID assigned by NFX matching engine	Trade ID assigned by NFX matching engine	TrdMatchID in Hex format