
Phase 2d Cutover

9/14/2021

Phase 2d Agenda

- Test Environment Plan Overview
- Production Environment Plan Overview
- Schema Changes
- Phase 2d Deployment Timeline
- Phase 2d Resources
- Phase 2d Coordinated Industry Test

Test Environment Plan Overview

- As of June 28, 2021, the Test Environment is available for Phase 2d testing.
 - All metadata and data files submitted to the Test Environment must be formatted per the schema definitions and requirements for Phase 2d.
 - Any data submitted to the Test Environment in Phase 2a/2b or Phase 2c format will be rejected.
- Continued testing of Phase 2c Industry Member data must be submitted to Prod-Mirror Environment.
- Testing of Phase 2a/2b data is no longer available in any environment.

Summary of Acceptable Schema in Each Environment

8 am ET on June 28, 2021 – 8 am ET on December 13, 2021	
Environment	Acceptable Schema
Industry Test Environment	Phase 2d
Prod-Mirror Environment	Phase 2c
Production Environment	Phase 2c

Phase 2d Release Rollout

Release 2d1 Industry Test – 6/28/2021	Release 2d2 Industry Test – 7/19/2021	Release 2d3 Industry Test – 8/2/2021	Release 2d4 Industry Test – 8/23/2021	2d Go-live Production – 12/13/2021
<p>Ingestion Industry Test Open for Machine-to-Machine File & Data Integrity Validations & Feedback</p> <ul style="list-style-type: none"> • Syntax Validations • Conditional Validations <p>CAT Reporter Portal</p> <ul style="list-style-type: none"> • Manual File Upload • Reporting Summary Statistics 	<p>Intrafirm Linkage Industry Test Open for Machine-to-Machine Intrafirm Linkage Validations & Feedback</p> <ul style="list-style-type: none"> • Reference Data Validations on <i>senderIMID, receiverIMID, destination</i> and <i>legDetails</i> OptionID/Symbol <p>CAT Reporter Portal</p> <ul style="list-style-type: none"> • Linkage File feedback • Linkage Statistics • Error Summary and Error Search including Error Correction • Direct Data Entry 	<p>Interfirm Linkage Industry Test Open for Machine-to-Machine Interfirm/Exchange Linkage Validations & Feedback</p> <ul style="list-style-type: none"> • Interfirm Quote Linkage • Interfirm/Exchange linkage for Route Modification Events including Unlinked feedback for Routed Order ID Mismatch • Firm to Exchange Trade Linkage for MOOT Events <p>CAT Reporter Portal</p> <ul style="list-style-type: none"> • Support Clearing Firm View of Correspondent Reporting Feedback submitted by Third-Party Vendor 	<p>Multi-leg Linkage Industry Test Open for Machine-to-Machine Multi-leg Linkage Validations & Feedback</p> <ul style="list-style-type: none"> • Interfirm & Exchange for Multi-leg Events • Intrafirm Out of Sequence checks <p>CAT Reporter Portal</p> <ul style="list-style-type: none"> • Reconciliation Statistics • Counterparty Statistics for MOOT linkages 	<p>Ingestion & All Linkage Production Open for Machine-to-Machine File, Data Integrity and All Linkage Validations & Feedback</p> <p>CAT Reporter Portal</p> <ul style="list-style-type: none"> • Manual File Upload • Reporting Summary Statistics including reconciliation • Counterparty Statistics for MOOT linkages • Linkage File Feedback • Error Summary and Error Search including Error Correction • Direct Data Entry • Support Clearing Firm View of Correspondent Reporting Feedback submitted by Third-Party Vendor

Phase 2d Compliance Date – 12/13/2021

Submissions Prior to Phase 2d Code Deployment

- The Phase 2d Production Go-Live date for all Industry Members is December 13, 2021.
- The transition from the Phase 2c to Phase 2d schema in the Production Environment will begin at approximately 8 am ET on December 13, 2021 via a code deployment.
- Prior to code deployment, all submissions to the Production Environment must be in Phase 2c format, no matter the Trade Date.

Submissions Post-Phase 2d Code Deployment

- After code deployment on December 13, 2021:
 - All metadata and data files must follow schema version 4.0.0 or higher. **Any files that are received after code deployment on December 13, 2021 with a prior schema version will reject.**
 - All data, including late events, repairs and corrections for events that originated prior to code deployment on December 13, 2021 must be reported in the Phase 2d format.

Phase 2d Feedback and Repairs

- Beginning on December 13, 2021, linkage errors will be returned in the Phase 2d format.
- Repairing a file and/or record that was submitted in the Phase 2c format prior to code deployment on December 13, 2021:
 - If the repair will be submitted after code deployment on December 13, 2021, the file or record must be repaired and resubmitted in the Phase 2d format.
 - Example: An event that occurred on CAT Trading Day December 10, 2021 is submitted to CAT by 8 am ET on December 13, 2021 in the Phase 2c format. Linkage feedback on this record will be returned in the Phase 2d format by 12 pm ET on December 13, 2021. Repairs made to this record after code deployment on calendar day December 13, 2021 must be submitted in the Phase 2d format.
- CAT Reporters will have the ability to make repairs via the Reporter Portal in the Phase 2d format after the Phase 2d code deployment is complete.

Submission and Feedback by Date and Phase

CAT Trading Day	Submission Due Date (ET)	Submission Format	Feedback Delivered By (ET)							
			12/8 12pm	12/9 12pm	12/10 12pm	12/13 12pm	12/14 12pm	12/15 12pm	12/16 12pm	12/17 12pm
12/7	12/8 8am	2c	1	2	3	4				
12/8	12/9 8am	2c		1	2	3	4			
12/9	12/10 8am	2c			1	2	3	4		
12/10	12/13 8am	2c				1	2	3	4	
12/13	12/14 8am	2d					1	2	3	4
12/14	12/15 8am	2d						1	2	3
12/15	12/16 8am	2d							1	2
12/16	12/17 8am	2d								1

Transition Support

- FINRA CAT will provide linkage feedback in the Phase 2d format beginning with the processing date of December 10, 2021, which is delivered by noon on December 13, 2021.
- For Errors Returned in CSV Format:
 - New fields applicable to Phase 2d will be represented with a delimiter; no values will be populated in those fields.
 - Values populated in fields retired in Phase 2d will not be removed.
 - Before resubmission, CAT Reporters must remove the value.
 - The delimiter must not be removed.
- For Errors Returned in JSON Format:
 - New required non-Boolean field (TIF code on MOOJ event): a “dummy” value of ‘AAA’ will be populated. This value meets the data type requirement but is *not* an allowable value that will pass data integrity validations.
 - New required Boolean fields will *not* be added.
 - New conditional fields will *not* be added.
 - Retired fields and values will *not* be removed.
 - Before resubmission, CAT Reporters must remove the field and value.

Changes to Existing Phase 2c Events

Event Type Code	Change Description	Seq# and Field Name
MENO	New conditional field added	46. netPrice
MEOR	New required field added	32. multiLegInd
	New conditional field added	33. pairedOrderID
	New conditional field added	34. infoBarrierID
	New conditional field added	35. netPrice
	New conditional field added	36. quoteKeyDate
	New conditional field added	37. quoteID
MEIR	New required field added	26. multiLegInd
	New conditional field added	27. netPrice
MEIM	New conditional field added	28. requestTimestamp
	New conditional field added	29. netPrice
MEIC	New conditional field added	16. requestTimestamp
	New conditional field added	17. infoBarrierID
MECO	New required field added	32. multiLegInd
	New conditional field added	33. infoBarrierID
	New conditional field added	34. netPrice

Changes to Existing Phase 2c Events

Event Type Code	Change Description	Seq# and Field Name
MECOM	New conditional field added	33. netPrice
MEOM	New conditional field added to <i>reserved for future</i> use position	22. requestTimestamp
	New conditional field added	53. netPrice
MEOMR	New conditional field added	43. netPrice
MEOJ	New conditional field added	32. netPrice
MEOC	New conditional field added	17. requestTimestamp
	New conditional field added	18. infoBarrierID
MEOCR	New conditional field added	15. infoBarrierID
MENQ	New required field added	27. manualFlag
	New conditional field added	28. electronicTimestamp
MEQR	New required field added	25. dupROIDCond
	New required field added	26. manualFlag
	New conditional field added	27. electronicTimestamp
MEQC	New required field added	15. manualFlag
	New conditional field added	16. electronicTimestamp

Changes to Existing Phase 2c Events

Event Type Code	Change Description	Seq# and Field Name
MEOT	New required field added	35. multiLegInd
	New conditional field added	36. infoBarrierID
MEOTS	New required field added	12. multiLegInd
MEOF	New conditional field added	20. infoBarrierID
MEPA	New optional field added	25. TIDType
MEAA	New optional field added	27. TIDType
MEOE	New conditional field added	33. netPrice
MONO	New required field added to <i>reserved for future</i> use position	28. solicitationFlag
	New conditional field added	32. RFQID
	New conditional field added	33. netPrice
MOOR	New required field added to <i>reserved for future</i> use position	30. multiLegInd
	New conditional field added	34. pairedOrderID
	New conditional field added	35. netPrice

Changes to Existing Phase 2c Events

Event Type Code	Change Description	Seq# and Field Name
MOOA	New required field added to <i>reserved for future</i> use position	29. solicitationFlag
	New conditional field added to <i>reserved for future</i> use position	30. pairedOrderID
	New conditional field added	34. netPrice
MOIR	New required field added	28. multiLegInd
	New conditional field added	29. netPrice
MOCO	New required field added	24. multiLegInd
	New conditional field added	25. netPrice
MOCOM	New conditional field added	25. netPrice
MOOM	New conditional field added to <i>reserved for future</i> use position	33. requestTimestamp
	New conditional field added	39. netPrice
	Field change to Conditional	10. priorOrderID
MOOJ	New required field added to	22. timeInForce
	New conditional field added	23. netPrice
MOOC	New conditional field added	17. requestTimestamp

Changes to Allowed Values

Field Name	Allowed Values Added	Allowed Values Removed
handlingInstructions	AIP, CASH, CTR, GP, NCTR, OCP, OFF, QCC, TTU, DLVF, DLVT, PBG, LCE, PCS	CNH, GVWAP, J3, SR, SMT
marketCenterID	ARCAOP, AMEROP, BOX, BZXOP, C2, CBOE, CHX, EDGXOP, EMLD, GEMX, ISE, MIAMI, MRX, NOBO, NOM, PEARL, PHLX	
allocationType	AVP, CMTA	FCUS, FDVP, FCSF, FDVF
timeInForce	GFD	
representativeInd	OS, OML, OMS	
fulfillmentLinkType	OS, OML	
side	S	

New Validations for Existing 2c Events

Field Name	Validations	Applicable Event Types
receivedQuoteID	receivedQuoteID must be populated when manualFlag is false.	MEQR
netPrice	If netPrice is populated, the price must be blank or zero	MENO,MEOR,MEOA,MEIR,MEIM,MECO,MECOM,MEOM,MEOJ,MEOE,MONO,MOOR,MOOA,MOCO,MOOM,MOOJ
aggregatedOrders	The aggregatedOrders must be populated when representativeInd = 'O'. The aggregatedOrders is optional when representativeInd = 'OS'	MONO, MOOM
firmDetails	The firmDetails must be populated if fulfilmentLinkType is in ('O'). The firmDetails must not be populated if fulfilmentLinkType is in ('OS')	MOOF
seqNum	Must be populated	MEQR
routeRejectedFlag	Must be populated	MOOR

Changes to Existing Phase 2c Events – Retired Fields

Event Type Code	Key	Event
quoteKeyDate	Optional	MEOT
quoteID	Optional	MEOT
quotingIDQS	Optional	MEOT
<Side Details>.quantity	Required	MEFA, MOFA
	Optional	MEOT, MEOF, MOOF
custType	Optional	MEPA, MEAA
priorUnlinked	Conditional	MONOS, MOIR, MOOC, MOCOC, MOOJ, MOCOM, MOOR, MOOA, MOOM, MOOF, MOFA, MOCO
nextUnlinked	Conditional	MONOS, MOIR, MOOJ, MOCOM, MONO, MOOR, MOOA, MOOM, MOCO

Phase 2d Cutover Deployment Timeline

- The Transition from the Phase 2c to Phase 2d schema will begin at approximately 8 am ET on December 13, 2021.
- FINRA CAT will communicate via email and system announcements when the code deployment is complete.
- **Recommendation:**
 - Submissions for the December 13, 2021 CAT Processing Date should not begin until notice that the Phase 2d deployment is complete.
 - If submissions occur prior to deployment completion, File Acknowledgement may be delayed.

Phase 2d Cutover Resources

- ▶ [CAT Alert – 2021-03, Phase 2d: Transitioning from Phase 2c and Coordinated Industry Tests](#)
- ▶ [Transition Support: Schema Changes to Existing Phase 2c Events](#)
- ▶ [Phase 2d Industry Member Technical Specifications](#)
- ▶ [Phase 2d Industry Member Schema](#)

Phase 2d Coordinated Industry Test

- FINRA CAT is facilitating six coordinated industry tests.
- Participation in the industry tests is optional, but all Industry Members are encouraged to participate.
- Industry Members may participate in one or more industry tests.
- The next coordinated industry test is CAT Trading Day October 1, 2021.
 - Industry Members are encouraged to submit a full day of production data to the Test Environment by 8 am on October 4, 2021.
 - FINRA CAT will perform intrafirm, interfirm and exchange linkage on Phase 2d reporting requirements and provide feedback.
 - FINRA CAT will then post a list of participating CAT Reporter IMIDs in both machine-readable and human-readable formats to the Reference Data page of www.catnmsplan.com by 9 am on October 6, 2021. Industry Members and CAT Reporting Agents should use this list to determine if any interfirm unlinked errors were caused by breaks in the linkage key or contra non-participation.

Key Dates for Phase 2d Coordinated Industry Tests

<u>Test Number</u>	CAT Trading Day of the Coordinated Industry Test	Data Due to Industry Test	List of Participating IMIDs Posted as Reference Data on the CAT Website
1	9/10/21	By 8 am on 9/13/21	By 9 am on 9/15/21
2	10/1/21	By 8 am on 10/4/21	By 9 am on 10/6/21
3	10/15/21	By 8 am on 10/18/21	By 9 am on 10/20/21
4	10/29/21	By 8 am on 11/1/21	By 9 am on 11/3/21
5	11/12/21	By 8 am on 11/15/21	By 9 am on 11/17/21
6	11/26/21	By 8 am on 11/29/21	By 9 am on 12/1/21

FINRA CAT Helpdesk

Questions may be directed to the FINRA CAT Helpdesk at 888-696-3348 or help@finracat.com

How to Ask a Question during Today's Call

- **For participants using computer audio:**
 - Click the “Raise Hand” button at the bottom of the participant’s window.
 - A visual prompt will indicate that your line has been unmuted.
- **For participants using phone audio:**
 - Enter *9 on your phone keypad.
 - An audio prompt will indicate that your line has been unmuted.