
Industry Checkpoint Call

April 27, 2021

Agenda

- Production Statistics
- Phase 2c Updates
- Open Issues
- General Announcements and Reminders
- Upcoming Key Dates
- Q&A

Production Statistics

Equities – Rolling Five Day Period

Initial T+1 vs. T+5 8 am Data Ready for Regulators

April 8, 2021 – April 21, 2021

Trade Date	Late%	Rejection Initial	Rejection Adjusted	Intrafirm Initial	Intrafirm Adjusted	Interfirm Sent Initial	Interfirm Sent Adjusted	Interfirm Received Initial	Interfirm Received Adjusted	Exchange Initial	Exchange Adjusted	TRF Initial	TRF Adjusted	Overall Error Rate Initial	Overall Error Rate Adjusted
4/8/2021	2.5264%	.0007%	.0001%	.0116%	.0031%	3.8138%	.0802%	1.7822%	.0858%	.5446%	.0133%	3.5299%	.1305%	3.3565%	2.5511%
4/9/2021	.4883%	.0008%	.0001%	.0039%	.0021%	.0767%	.0762%	2.5454%	.0942%	.5134%	.0107%	.1908%	.1405%	.9230%	.5135%
4/12/2021	.0021%	.0010%	.0003%	.0022%	.0019%	.0632%	.0574%	.0789%	.0650%	.5340%	.0100%	.1854%	.1381%	.1195%	.0213%
4/13/2021	3.2820%	.0009%	.0003%	.0019%	.0018%	3.5563%	.0505%	1.8237%	.0517%	.6596%	.0124%	.1753%	.1443%	4.1014%	3.2979%
4/14/2021	.0021%	.0008%	.0003%	.0025%	.0023%	.0579%	.0577%	.0632%	.0575%	.5226%	.0106%	.1776%	.1413%	.1125%	.0209%
4/15/2021	.0075%	.0008%	.0003%	.0023%	.0020%	.0603%	.0226%	.0674%	.0231%	.5384%	.0113%	.1692%	.1278%	.1236%	.0172%
4/16/2021	.0007%	.0023%	.0018%	.0029%	.0021%	.0403%	.0173%	.0427%	.0186%	.5372%	.0107%	.1826%	.1306%	.1128%	.0106%
4/19/2021	.0005%	.0011%	.0006%	.0021%	.0019%	.1616%	.0920%	.1157%	.0444%	.5647%	.0103%	.1956%	.1512%	.1389%	.0219%
4/20/2021	.2548%	.0055%	.0004%	.0093%	.0027%	.2533%	.0510%	.6263%	.0551%	.5377%	.5307%	.1930%	.1535%	.4746%	.3646%
4/21/2021	.0066%	.0007%	.0002%	.0057%	.0055%	.0814%	.0219%	.0840%	.0168%	.5418%	.0086%	.2029%	.1602%	.1307%	.0170%

Options - Rolling Five Day Period

Initial T+1 vs. T+5 8 am Data Ready for Regulators

April 8, 2021 - April 21, 2021

Trade Date	Late%	Rejection Initial	Rejection Adjusted	Intrafirm Initial	Intrafirm Adjusted	Interfirm Sent Initial	Interfirm Sent Adjusted	Interfirm Received Initial	Interfirm Received Adjusted	Exchange Initial	Exchange Adjusted	Overall Error Rate Initial	Overall Error Rate Adjusted
4/8/2021	.5102%	.0317%	.0309%	.0599%	.0505%	12.1321%	.0129%	.2187%	.1157%	.1387%	.1359%	.7627%	.5951%
4/9/2021	.0102%	.0182%	.0174%	.0624%	.0561%	.0201%	.0186%	.1252%	.1207%	.1435%	.1312%	.0877%	.0789%
4/12/2021	.0094%	.0777%	.0772%	.0467%	.0356%	.0207%	.0124%	.1103%	.1063%	.1122%	.1018%	.1370%	.1263%
4/13/2021	28.5556%	.0489%	.0481%	.0556%	.0498%	22.2029%	.0181%	.1727%	.0810%	.1069%	.1048%	28.9418%	28.6437%
4/14/2021	.0060%	.0796%	.0790%	.0449%	.0385%	.0162%	.0110%	.1808%	.0665%	.0788%	.0785%	.1222%	.1160%
4/15/2021	.0188%	.0701%	.0694%	.0472%	.0426%	.0114%	.0105%	.0739%	.0701%	.0910%	.0891%	.1261%	.1219%
4/16/2021	.0189%	.0977%	.0967%	.0418%	.0400%	.0149%	.0115%	.0807%	.0769%	.1033%	.1010%	.1590%	.1560%
4/19/2021	.0006%	.0813%	.0806%	.0408%	.0354%	.0146%	.0128%	.1005%	.0823%	.0842%	.0824%	.1197%	.1146%
4/20/2021	.0001%	.0974%	.0389%	.0125%	.0079%	.0149%	.0123%	.0875%	.0836%	.0235%	.0226%	.1143%	.0525%
4/21/2021	.1031%	.0804%	.0796%	.0151%	.0077%	.0453%	.0124%	.1409%	.1128%	.0275%	.0259%	.2039%	.1971%

Phase 2c Updates

2c Test Statistics & Observations

April 12, 2021 – April 23, 2021

Item	Statistic
Total Unique Firms in Industry Test	865
Representative Order Linkage Rate	97.95%
Fulfillment Order Linkage Rate	99.16%
Allocation Events Rejection Rate	2.81%
Top Allocation Events Rejection Errors	Missing or Invalid <i>symbol</i> Missing or Invalid <i>firmDesignatedID</i> Missing or Invalid <i>allocationType</i> Missing or Invalid <i>DVPCustodianID</i>

2c Initial Production Statistics & Observations

April 26, 2021

- ▶ Phase 2c is now live in the Production Environment
 - All submissions, including repairs, must be submitted in Phase 2c format
- ▶ Rejection Rate
 - Equities 0.62%
 - Options 0.01%
- ▶ Initial Intravenue Linkage Error Rate
 - Equities 1.51%
 - Options 0.04%

Open Issues (2a/2b)

FINRA CAT File Submission and Data Integrity (2a/2b)

Open Issues List – As of 4/27/2021

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date/Workaround	Production Environment Targeted Release Date/Workaround	Area
1	Open	N/A	Successful file delete submissions are incorrectly getting counted in the rejected files count in the statistics. Does not impact Compliance Error Rate.	Code Release	Low	2Q 2021	2Q 2021	Statistics
2	Open	N/A	FINRA CAT did not recognize the early close and improperly marked as late events that occurred between 1:15 and 4:15 pm ET and were reported by 8 am ET on the next CAT Trading Day. Impact is limited to two days - 11/27/2020 & 12/24/2020.	Code Release	Low	2021	2021	Statistics

FINRA CAT Linkage (2a/2b)

Open Issues List – As of 4/27/2021

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date/Workaround	Production Environment Targeted Release Date/Workaround	Area
1	Open	N/A	Parent not found and Named errors that are reconciled continue to be displayed as 'U' (Unrepaired) in Error Summary & Error Search screens. Feedback & Reporting Summary statistics are not impacted by this issue.	Code Release	High	Update: Currently evaluating alternative approach	Update: Currently evaluating alternative approach	Error Summary & Error Search Reporter Portal
2	Open	3601	Out of Sequence Errors that are caused by an incorrect Time Stamp on the parent event are not being properly reconciled when the parent Time Stamp is corrected. Repaired counts and Adjusted Unlinked Rate are impacted by this issue.	Code Release	High	2021	2021	Intrafirm Statistics
3	Open	Multiple	Parent not found errors are being generated for open option orders when the option symbol changes due to corporate action.	Code Release	Low	Update: 2021 Note that this issue only impacts Options Intravenue Exchange Errors	Update: 2021 Note that this issue only impacts Options Intravenue Exchange Errors	Intrafirm Linker Feedback & Statistics
4	Open	9004 8004 7004 5004	FINRA CAT did not recognize the early close and improperly marked as unlinked, certain events that occurred between 1:15 and 4:15 pm ET and were reported by 8 am ET on the next CAT Trading Day. Any events that were marked as unlinked were automatically reconciled the following day. Impact is limited to two days - 11/27/2020 & 12/24/2020.	Code Release	Low	2021	2021	Interfirm Exchange Trade Linker Feedback

FINRA CAT Linkage (2a/2b)

Open Issues List – As of 4/27/2021

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date/Workaround	Production Environment Targeted Release Date/Workaround	Area
5	Open	396	FINRA CAT is incorrectly generating warning errors on secondary events in instances where the parent DAY order was subsequently modified to a GTC order.	Code Release	Medium	To be scheduled	To be scheduled	Intrafirm Linker Feedback
6	Open	8003 8004 9003 9004	FINRA CAT is incorrectly generating an unlinked error for the first time on T+4 for previously linked events in scenarios when the two events that were initially linked occurred on two separate trade dates. For example, an order routed at 6 pm on one calendar day and is reported as accepted by the receiving firm at 8 am on the next calendar day.	Code Release	Medium	To be scheduled	To be scheduled	Interfirm Linker Feedback

FINRA CAT Linkage (2a/2b)

Open Issues List – As of 4/27/2021

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date/Workaround	Production Environment Targeted Release Date/Workaround	Area
7	Open	6003	Industry Members are incorrectly receiving options exchange unlinked errors for subsequent day order modifications/ adjustments to long lived orders previously routed to the exchange. Options exchange reporting modification required. Nine firms impacted.	N/A	Medium	3Q 2021	3Q 2021	Options Exchange Linker Feedback

FINRA CAT Open Issues List (2a/2b)- Planned Enhancements

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date	Production Environment Targeted Release Date	Area
1	Open	2122	Incorrect error code is generated when an array field (e.g., clientDetails) is provided as a Name/Value pair.	Code Release	Low	To be scheduled	To be scheduled	Ingestion Validations
2	Open	2027	Incorrect error code is being generated when eventTimestamp is a future date (2027- eventTimestamp must be in the correct format instead of 2139 - eventTimestamp is greater than the current date and time).	Code Release	Low	To be scheduled	To be scheduled	Ingestion Validations

FINRA CAT Recently Closed Issues List (2a/2b)

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date	Production Environment Targeted Release Date	Area
1	Closed	N/A	FINRA CAT is incorrectly accepting invalid name/value in timeInForce of GTD/DAY.	Code Release	Medium	2c only: 1/25/2021	2c only: 4/26/2021	Ingestion Feedback & Statistics
2	Closed	N/A	The below values are not yet implemented: <ul style="list-style-type: none"> handlingInstructions values 'TTF', 'TTO', and 'TTS'. 	Code Release	Medium	2a/2b: 1/25/2021	2a/2b: 2/14/2021	Ingestion
						2c: 1/25/2021	2c: 4/26/2021	
3	Closed	2133	For Name/Value Pair Data type fields, providing a value that is not in allowable values list returns error code 2133 (Additional Field) instead of error code 2101 (Missing or Invalid timeInForce).	Code Release	Low	2c only: March 2021	2c only: 4/26/2021	Ingestion Validations
4	Closed	Multiple	FINRA CAT is improperly suppressing <u>interfirm</u> unlinked errors for the equity leg of complex orders. The unlinked error should only be suppressed for the equity leg of complex orders routed to or from an options exchange.	Code Release	Medium	4/26/2021	4/26/2021	Interfirm Linker Feedback
5	Closed	Multiple	Named Errors related to interfirm and exchange linkage are not reconciled in certain edge scenarios such as when a route/accept is rejected or has a linkage error due to mismatched senderIMID/receiverIMID. Does not impact Compliance Error Rate.	Code Release	Medium	4/16/2021	4/16/2021	Interfirm Exchange Linker Feedback

Open Issues (2c)

FINRA CAT File Submission and Data Integrity (2c)

Open Issues List – As of 4/27/2021

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date/Workaround	Production Environment Targeted Release Date/Workaround	Area
1	Open	2044	FINRA CAT is incorrectly rejecting records in instances where marketCenterID is populated and reportingExceptionCode is populated with a value of 'C'.	Code Release	High	5/10/2021	5/10/2021	Ingestion Feedback & Statistics
2	Open	2067	FINRA CAT is incorrectly rejecting MEOE events in instances where orderType is 'LMT' and price is not populated.	Code Release	High	5/10/2021	5/10/2021	Ingestion Feedback & Statistics
3	Open	2101	FINRA CAT is incorrectly rejecting records in instances where timeInForce is populated with a weekend date for a GTX or a DAY order.	Code Release	High	5/10/2021	5/10/2021	Ingestion Feedback & Statistics
4	Open	2177	Change settlementDate field from Required to Conditional to facilitate reporting of allocations in "when-issued" and "when-distributed" securities.	Code Release	High	5/10/2021	5/10/2021	Ingestion Feedback & Statistics

FINRA CAT Recently Closed Issues List (2c)

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date	Production Environment Targeted Release Date	Area
1	Closed	3501	FINRA CAT is incorrectly generating an out of sequence error on an internal route event when the eventTimestamp on the MEIR/MOIR is prior to the eventTimestamp on the parent MEOM/MEIM/MOOM/MOIM event.	Code Release	Medium	4/26/2021	4/26/2021	Linkage Feedback

Planned Industry Member Technical Specification Updates- Last Updated 4/27/2021 – Phase 2c

#	Status	Summary	Release Date	Spec Version
1	Open	Change <i>settlementDate</i> field from Required to Conditional to facilitate reporting of allocations in “when-issued” and “when-distributed” securities.	5/10/2021	3.1.0 r13
2	Open	Update language for <i>reportingExceptionCode</i> field to match language in <i>marketCenterID</i> field: When the <i>marketCenterID</i> field is blank, the <i>reportingExceptionCode</i> field must be populated with a value other than 'C.' When the <i>marketCenterID</i> field is populated, the <i>reportingExceptionCode</i> must be blank or populated with a value of 'C.'	5/10/2021	3.1.0 r13

General Announcements and Reminders

Environment Availability & Submissions

- ▶ Industry Test Environment is unavailable between 4/26/21 and 6/27/21
- ▶ IMs may continue to test Phase 2c submissions in the Prod-Mirror Environment (Phase 2a/2b submissions will no longer be accepted in any environment)
- ▶ Starting on 6/28/21 the Test Environment will reopen for Phase 2d submissions only

Trade Date	4/26/21 – 6/27/21	6/28/21 – 12/12/21	As of 12/13/22
Production Environment	Phase 2c	Phase 2c	Phase 2d
Industry Test Environment	Connection disabled	Phase 2d	Connection disabled
Prod-Mirror Environment	Phase 2c	Phase 2c	Phase 2d

Update: Enhanced Disaster Recovery Testing

- ▶ **FINRA CAT has rescheduled its internal DR failover test to May 14, 2021**
 - Internal test will validate failover processes, procedures and recovery times
 - All Environments, including Production, Industry Test and Prod-Mirror, will be disabled between May 14, 2021 (8pm ET) through May 16, 2021 (2pm ET)
 - All Industry Member submissions and portal access will be disabled during this testing period

Other Announcements

- ▶ The next Industry Testing Checkpoint Call will be on May 11, 2021.
- ▶ The recording and presentation from the April 15, 2021 industry webinar, Monthly CAT Implementation Update and FINRA (SRO) Status Update on OATS Retirement, is available at www.catnmsplan.com.

Upcoming Key Dates

Upcoming Key Dates for Phase 2d

Topic	Event	Date
Industry Call: Industry Testing Checkpoint	Industry Testing Checkpoint Calls – Bi-weekly, on Tuesdays at 4:15 pm (ET)	January 7, 2020 until further notice
Release Availability	Test Environment Opens for Phase 2d reporting requirements	June 28, 2021
Compliance Go-Live	Production Go-Live for Phase 2d reporting requirements	December 13, 2021

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.

FINRA CAT Helpdesk

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