Industry Test Release Status

May 5, 2020

Agenda

- Industry Test Release Update
- General Announcements & Reminders
- Upcoming Key Dates
- Q&A

Industry Test Release Update

Industry Member 2a/2b - Release 1 (File & Data Integrity) Release Rollout

Live in Industry Test

11/18/2019 Industry Test Release 1.1

- CAT Reporter Portal: ATS Order Types
- CAT Reporter Portal: CAT Reporting Relationships
- Multi-Factor
 Authentication Enabled
- Publication of IMID & Conflict List to catnmsplan.com
- Publication of Issue/Option Symbol Reference Lists to catnmsplan.com

12/16/2019 Industry Test Release

- Industry Test Open for Machine-to-Machine File
 Data Integrity
 Validations & Feedback
- CAT Reporter Portal: Basic File Statistics
- CAT Reporter Portal:
 Manual File Upload

2/24/2020 Industry Test Release 1.3

- CAT Reporter Portal: File Submission feedback
- CAT Reporter Portal: Reporting Statistics (i.e. number of records received, accepted, rejected and feedback summaries)
- CAT Reporter Portal: Error Rates
- CAT Reporter Portal: Direct data entry & corrections
- CAT Reporter Portal: Bulk Repair of applicable Syntax/Semantic Errors

03/23/2020 Industry Test Release 1.4

- Announcements
- System Status

Open

4/13/2020 Prod Environment Open

- 2a Go-Live June 22
- 2b Go-Live July 20

Industry Member 2a/2b - Release 2 (Intrafirm) Release Rollout

Intrafirm Release 2.1 Industry Test – 4/20/2020

- Industry Test Open for Machine-to-Machine Intrafirm Validations & Feedback
- CAT Reporter Portal: Basic Intrafirm Statistics

Intrafirm Release 2.1 Production – 5/4/2020

 Production Open for Machine-to-Machine Intrafirm Validations & Feedback Intrafirm Release 2.2
Industry Test – 5/18/2020
Production – 5/18/2020

CAT Reporter Portal

- Linkage File feedback
- Basic Intrafirm Statistics
 Simplified Screen Accurate Intrafirm
 Errors/Warnings Counts

Intrafirm Release 2.3
Industry Test – 6/1/2020
Production – 6/1/2020

CAT Reporter Portal

- Linker Error Statistics

 (i.e. number of records with Linker Errors or Warnings by Error Codes)
- Comprehensive Intrafirm Statistics (including adding Attempted counts, Repaired Records and Adjusted Intrafirm Error Rates)

Intrafirm Release 2.4
Industry Test – 6/29/2020
Production – 6/29/2020

CAT Reporter Portal

 Ability to view and correct Intrafirm Linkage Errors

Industry Test Status – As of May 1, 2020 Statistics

Item	Statistic – Last Week	Statistic – This Week	Increase/Decrease
Number of Firms Certified	408	470	Increased by 62 firms
Number of Firms operating under CAT Reporter Agreements	1,387	1,393	Increased by 6 firms
Number of Reporting Relationships Entered	2,059 relationships from 1,093 firms	2,102 relationships from 1,110 firms	Increased by 43 across 17 firms
Number of ATS Order Types Entered	614 order types from 25 ATS firms	614 order types from 25 ATS firms	No change
Number of Total Submitters	180	192	Increased by 12 submitters
Number of IMIDs	1,474 from 1,038 firms	1,520 from 1,074 firms	Increased by 46 across 36 firms
Number of Files Received	2,289,279 • Reporter Portal: 24,476 • Private Line: 2,264,803	2,639,155Reporter Portal: 25,045Private Line: 2,614,110	Increased by 349,876 • Reporter Portal: 569 • Private Line: 349,307
Number of Files Rejected	394,425	463,261	Increased by 68,836
File Reject Rate	17.22%	17.55%	Increased by 0.33%

Industry Test Status – April 27 – May 1, 2020 Statistics

	Product Type									
CAT Processing Date	Equities			Options			DEL/Unparsed records			
	Processed	Rejected	Rejection Rate	Processed	Rejected	Rejection Rate	Processed	Rejected	Rejection Rate	
4/27/2020	4,121,505,892	6,086,609	0.15%	292,525,341	367,291	0.13%	27,670	27,660	99.96%	
4/28/2020	9,324,380,118	9,920,867	0.11%	407,812,138	61,054	0.01%	9,866	9,858	99.92%	
4/29/2020	9,031,490,893	112,248,024	1.24%	353,387,365	95,722	0.03%	19,998	19,935	99.68%	
4/30/2020	11,566,540,955	17,986,107	0.16%	457,351,615	28,696,145	6.27%	3,342	3,325	99.49%	
5/1/2020	8,757,927,817	13,620,478	0.16%	395,509,215	23,220,557	5.87%	4,953	4,742	95.74%	
Total	42,801,845,675	159,862,085	0.37%	1,906,585,674	52,440,769	2.75%	65,829	65,520	99.53%	

FINRA CAT Intrafirm Linkage Observations

- > Unlinked errors were observed in the following scenarios:
 - ➤ Duplicate *firmROEID*
 - ➢ orderKeyDate of secondary event referencing eventTimestamp instead of the orderKeyDate of the associated primary event.
 - > priorOrderKeyDate referencing eventTimestamp instead of the orderKeyDate of the associated primary event.
 - ➤ orderKeyDate on side details not matching the orderKeyDate on the originating event of the participating order.
- Linkage Feedback Files are named by CAT. These feedback files represent Linkage Feedback across all submissions for the CATReporterIMID/Submitter combination. The Feedback is not associated with specific submission file(s).
 - The file name includes the Processing Date for which the Unlinked Feedback represents.

FINRA CAT Open Issues List – As of 5/5/2020 Release Planned/Workaround Provided

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date/Workaround	Production Environment Targeted Release Date/Workaround	Area
1	Open	N/A	Linkage Warning count in Intrafirm statistics does not include Error Code 397 (Late Reported Intrafirm Event).	Code Release	Medium	5/18/2020	5/18/2020	Intrafirm Statistics
2	Open	N/A	Reporter Portal is not accurately reflecting Repair Count and Adjusted Error Rate when corrections submitted for a single day per firm exceed 100,000. Additionally, Error Counts on Error Summary screen do not reflect errors in excess of 100,000.	Code Release	Medium	Workaround: FINRA CAT Helpdesk will support Long term fix: Release planning in progress	Workaround: FINRA CAT Helpdesk will support Long term fix: Release planning in progress	Events Statistics
3	Open	N/A	Few firms are experiencing isolated timeout issues errors when accessing the Error Summary Screen in the Portal.	Code Release	Low	4/20/2020	5/18/2020	Reporter Portal
4	NEW – Open	N/A	FINRA CAT is incorrectly accepting pipe () value in text fields within multi-dimensional array (e.g. orderID in aggregatedOrders).	Code Release	Medium	To be scheduled	To be scheduled	Ingestion Validations
5	NEW – Open	N/A	In Industry Test only, Intrafirm statistics beyond T+1 are not correctly displayed.	Code Release	Very High	Fix In Progress	N/A	Intrafirm Statistics

FINRA CAT Open Issues List - Planned Enhancements

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date	Production Environment Targeted Release Date	Area
1	Open	2019	FINRA CAT is accepting the following scenario instead of rejecting – <i>destinationType</i> = F and <i>destination</i> not provided on Order Route.	Code Release	High	5/11/2020	5/18/2020	Ingestion Validations
2	Open	Multiple	FINRA CAT is accepting negative values in quantity fields.	Code Release	High	5/11/2020	5/18/2020	Ingestion Validations
3	Open	Multiple	FINRA CAT is accepting the following scenario instead of rejecting – Future dates in some fields.	Code Release	Low	5/11/2020	5/18/2020	Ingestion Validations
4	Open	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	To be scheduled	To be scheduled	Ingestion Validations
5	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
6	Open	N/A	Isolated issue with Timeout Warnings at Integrity phase resulting in missing File Integrity feedback.	Monitoring for recurrence	Low	N/A	N/A	Integrity Feedback
7	Open	1121	Few firms are incorrectly receiving file integrity errors due to pairing issues between the meta and data files.	Monitoring for recurrence	Low	N/A	N/A	Integrity Feedback
8	Open	N/A	Firms are unable to edit a record in the Pending Submissions screen if they are using Firefox browser and have logged into the Portal via SRG. This issue does not impact creating or submitting an event via the Portal.	Monitoring for recurrence	Low	N/A	N/A	Reporter Portal

FINRA CAT Recently Closed Issues

#	Status	Error Code	Summary	Resolution	Priority	Test Environment Targeted Release Date/Workaround	Production Environment Targeted Release Date/Workaround	Area
1	Closed	Multiple	Fulfillment events with a <i>fulfillmentLinkType</i> of YF and YE are incorrectly being included in feedback files.	Code Release	High	4/24/2020	5/4/2020	Intrafirm Feedback
2	Closed	Multiple	FINRA CAT is incorrectly unlinking a two-sided event (trade and fulfillment) associated with a long lived order when the order originated prior to T-4. 'T' being the event date on the trade/fulfillment.	Code Release	High	5/4/2020	5/4/2020	Intrafirm Feedback
3	Closed	N/A	Incorrect processing date on Linkage Feedback file for errors/warning generated for an event reported on a prior processing date.	Code Release	High	4/30/2020	5/4/2020	Intrafirm Feedback

Planned Industry Member Technical Specification Updates- Last Updated 5/5/2020

#	Status	Summary	Release Date	Spec Version
1	Open	 Add clarification surrounding feedback file naming constructs for ingestion and linker stages A zero byte linkage.success feedback file is generated when there are no linkage errors. Section 7.1.2, #6 incorrectly includes '_Group' in the example. 	To Be Scheduled	2a/2c
2	Open	JSON Delete file examples in Appendix H were updated in v2.21 r4 and v3.1.0 r2 to remove Ingestion feedback on delete file instruction. This needs to be updated in CSV examples.	To Be Scheduled	2a/2c
3	Open	 Inconsistencies between Spec versions: 2c Spec – JSON success example in 7.5.2 should align with CSV example – meta file should read empty. This is reflected in 2a Spec. 2c Spec – JSON Example for linkage discovery errors – meta file shouldn't be empty. This is reflected in the 2a Spec. 	To Be Scheduled	2c

General Announcements & Reminders

FINRA CAT Reminders

- Industry Members will not receive details for the records that were marked as late. FINRA CAT is analyzing the possibility of providing the file names containing records that were marked as late.
- All Test Symbols (equity and options) will be rejected in the Production Environment.
- ➤ The processing date of all submissions will be assigned based on the received timestamp of the associated metadata file. If a data file is received prior to T+1 8:00 AM EST with the associated metadata file submitted after T+1 8:00 AM EST, the submissions will be considered late.

FINRA CAT Reminders

- > File Acknowledgement is anticipated to be delivered within 10 minutes of file submission and no later than 1 hour of file submission. Submitters should not resubmit files earlier than 1 hour after original file submission.
- ➤ Consolidated Audit Trail, LLC and FINRA CAT, LLC will maintain our Weekly Industry Checkpoint Calls on Tuesdays at 4:15 pm ET until further notice.

Upcoming Key Dates

Upcoming Key Dates for Release 2a/2b

Topic	Event	Date
Industry Call: Industry Testing Checkpoint	Weekly Industry Testing Checkpoint Calls – Every Tuesday at 4:15 pm (ET)	January 7, 2020 until further notice
Release Availability	Production Open for Machine-to-Machine Intrafirm Validations & Feedback	May 4, 2020
Release Availability	Production Open for CAT Reporter Portal Intrafirm Validations & Feedback	May 18, 2020
Industry Test Certification	Industry Members and CAT Reporting Agents must complete production readiness testing for 2a reporting	June 8, 2020
Compliance Go-Live	Compliance Go-Live for Equities 2a file submission and data integrity validations	June 22, 2020
Industry Test Certification	Industry Members and CAT Reporting Agents must complete production readiness testing for 2b reporting	July 6, 2020
Compliance Go-Live	Compliance Go-Live for Options 2b file submission and data integrity validations	July 20, 2020
Compliance Go-Live	Compliance Go-Live for Equities Phase 2a Intrafirm Compliance Date	July 27, 2020
Compliance Go-Live	Compliance Go-Live for Options Phase 2b Intrafirm Compliance Date	August 24, 2020

How to Ask a Question during Today's Call

For participants using computer audio:

- Click the "Raise Hand" button at the bottom of the participants 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

Appendix

Onboarding – Certification of Production Readiness Testing

- ➤ Once CAT Reporters have completed **all** onboarding steps, including the successful completion of the Production Readiness Testing, each IM and CRA must contact the FINRA CAT Helpdesk (888-696-3348 or help@finracat.com).
- > The FINRA CAT Helpdesk will require the Processing Date(s) on which the testing occurred.
- Upon verification of the Production Readiness Testing and all other Onboarding Steps by FINRA CAT, CAT Reporters will be granted access to the CAT Production Environment, and a notification confirming access will be sent.

FINRA CAT Onboarding Guide is posted at https://catnmsplan.com/registration/