
Industry Test Release Status

February 25, 2020

Agenda

- Industry Test Release Update
- General Announcements & Reminders
- Upcoming Key Dates
- Q&A
- Industry Member Release 1.3 Demo
- 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 1.2

- 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

4/20/2020 – 2a Go-Live
5/18/2020 – 2b Go-Live

- 2a Go-Live – Industry Member 2a Reporting Required on April 20
- 2b Go-Live – Industry Member 2b Reporting Required on May 18

Industry Test Status – As of February 24, 2020 Statistics

Item	Statistic – Last Week	Statistic – This Week	Increase/Decrease
Number of Firms operating under CAT Reporter Agreements	1093	1157	Increased by 64
Number of Reporting Relationships Entered	1,182 relationships from 695 firms	1,290 relationships from 752 firms	Increased by 108 across 57 firms
Number of ATS Order Types Entered	557 order types from 19 ATS firms	567 order types from 20 ATS firms	Increased by 10 and 1 firm
Number of Total Submitters	108	118	Increased by 10
Number of IMIDs	480 from 338 firms	513 from 370 firms	Increased by 33 across 32 firms
Number of Files Received	290,477 <ul style="list-style-type: none"> Reporter Portal: 12,330 Private Line: 278,147 	350,152 <ul style="list-style-type: none"> Reporter Portal: 13,271 Private Line: 336,881 	Increased by 59,675 <ul style="list-style-type: none"> Reporter Portal: 941 Private Line: 58,734
Number of Files Rejected	86,259	92,769	Increased by 6,510
File Reject Rate	29.70%	26.47%	Decreased by 3.23%
Number of Records Processed in Ingestion Phase (Record level validations)	12,337,592,613	16,330,201,416	Increased by 3,992,608,803
Number of Processed Records Rejected	1,293,486,119	1,659,614,255	Increased by 366,128,136
Current Reject Rate Overall of Processed Data	10.48%	10.16%	Decreased by 0.32%

Industry Test Status – February 18– February 24, 2020 Statistics

CAT Processing Date	# Total Submitters	# of IMIDs	# of Files Received	# of Files Rejected	File Reject Rate	# of Validated Records	# of Validated Records Rejected	Validated Records Reject Rate
2/18/2020	48	242	11,521	2,168	18.82%	567,429,767	25,315,847	4.46%
2/19/2020	52	246	17,001	3,111	18.30%	1,122,069,214	175,266,970	15.62%
2/20/2020	44	253	4,395	66	1.50%	250,361,974	41,666,453	16.64%
2/21/2020	56	264	15,025	342	2.28%	1,165,505,934	106,426,751	9.13%
2/24/2020	59	167	11,326	175	1.55%	886,787,163	17,452,071	1.97%

Known FINRA CAT Issues – Open

#	Status	Error Code	Summary	Resolution	Workaround	Targeted Release Date	Area
1	Open	Multiple	FINRA CAT is accepting the following scenario instead of rejecting – Future dates in some fields.	Under Review	None	To Be Scheduled	Validations
2	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).	Under Review	None	To Be Scheduled	Validations
3	Open	2122	Incorrect error code is generated when an array field (eg: clientDetails) is provided as a Name/Value pair.	Under Review	None	To Be Scheduled	Validations
4	Open	2142	Space in multi-dimensional array field not treated as blank. For E.g space in aggregatedOrders when representativeInd is populated as 'YF', 'YE' or 'N' – Rejecting as Invalid aggregatedOrders (Error Code 2142).	Code Release	None	To be Scheduled	Validations
5	Open	2153	Isolated instances of data file not readable error for well-formed JSON data files.	Under Review	None	To Be Scheduled	Validations
6	Open	1116	Isolated issue where exceeding length in file version field in metadata file – Not generating integrity failed feedback	Under Review	None	To Be Scheduled	Validations
7	NEW – Open	2081	receivedQuoteID (optional for 2a) blank – Rejecting as Invalid receivedQuoteID	Code Release	None	To be scheduled	Validations/ Reporter Portal
8	NEW – Open	2019	Route event rejecting for invalid destination when destination is a NYSE floor broker booth number.	Under Review	None	N/A	Reference Data
9	NEW – Open	2133	Multi-dimensional array fields in MEOTS, MOOF and MOFA events – Rejecting as invalid because portal includes additional fields (FDID and accountHolderType) that are not applicable to these specific events.	Code Release	None	To be scheduled	Reporter Portal
10	NEW – Open	N/A	Reporter Portal is not accurately reflecting Repair Count when corrections submitted for a single day per firm exceeds 100,000. Additional impact to Adjusted Error Rate.	Code Release	None	To be scheduled	Statistics
11	NEW – Open	N/A	Firms not getting credit for rejections corrected via a file delete instruction.	Code Release	None	To be scheduled	Statistics

*** Known Issues List is published on www.catnmsplan.com under “Technical Specifications” ***

Known FINRA CAT Issues – Recently Closed

#	Status	Error Code	Summary	Resolution	Workaround	Release Date	Area
1	Closed	N/A	Metadata File Rejection count does not correctly count all metadata rejection scenarios.	Code Release	None	2/24/2020	Statistics
2	Closed	2098	Equity symbols expiration/addition intra day – Rejecting as symbol not effective.	Code Release	None	2/24/2020	Validations
3	Closed	2036	handlingInstructions value of 'RAR' (optional 2a) rejecting as invalid.	Code Release	None	2/24/2020	Validations
4	Closed	2043	<i>manualOrderID</i> (optional for 2a) blank – Rejecting as Invalid <i>manualOrderID</i> when <i>electronicDupFlag</i> is populated as true.	Code Release	None	2/24/2020	Validations
5	Closed	2048	For ATS firms, <BLANK> <i>nbboTimestamp</i> if <i>nbboSource</i> is NA rejecting as invalid.	Code Release	None	2/24/2020	Validations

FINRA CAT Reminders

- The Error Summary Export feature is scheduled for release prior to Go-Live.
- Error details are not available for data submitted prior to February 24, 2020.

General Announcements & Reminders

Onboarding – Certification of Production Readiness Testing

Self Reporters

- **Step 1:** Successfully connect to SFTP and/or login to the CAT Reporter Portal Test Environment
- **Step 2:** Successfully submit at least one data file and one metadata file to the Test Environment for each of its CAT Reporter IMIDs without error
- **Step 3:** Successfully submit a single day of production data to the Test Environment with an error rate of less than 10% (must include all IMIDs with reportable activity on the chosen day)
- **Step 4:** Record the CAT Processing Date on which the single day of production data was submitted to the Test Environment

CAT Reporting Agents

- **Step 1:** Successfully connect to SFTP and/or login to the CAT Reporter Portal Test Environment
- **Step 2:** Verify the CAT Reporting Agent Relationship in the Test Environment to ensure the CRA can transmit the data to CAT successfully
- **Step 3:** Successfully submit at least one data file and one metadata file to the Test Environment for each CAT Reporter IMID for which it plans to report without error
- **Step 4:** Successfully submit a single day of production data to the Test Environment with an error rate of less than 10% (must include all IMIDs with reportable activity on the chosen day)
- **Step 5:** Record the CAT Processing Date on which the single day of production data was submitted to the Test Environment

Industry Members using a CAT Reporting Agent

- **Step 1:** Firm and CRA successfully connect to SFTP and/or login to the CAT Reporter Portal Test Environment
- **Step 2:** CAT Reporter defines one or more CAT Reporting Agent Relationships in the Test Environment
- **Step 3:** Record the CAT Processing Date(s) on which each CRA has successfully submitted a single day of production to the Test Environment on the Industry Member's behalf. NOTE: Each CAT Reporting Agent reporting on behalf of the CAT Reporter must complete a production readiness test but do not have to do so on the same production day. The combined total error rate must be less than 10%

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/>

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 – March 20, 2020
Industry Webinar and Demo	Regularly Scheduled Weekly Industry Testing Checkpoint Call and CAT Reporter Portal Industry Webinar and Demo of Industry Test Release 1.3 functionality	February 18, 2020
Industry Test Release 1.3	Industry Test Release of: - CAT Reporter Portal Error Correction and Feedback	February 24, 2020
Industry Webinar and Demo	Industry Test Release 1.3 Go-Live Checkpoint and CAT Reporter Portal Demo of: - Submission, Error Correction & Feedback	February 25, 2020
Industry Webinar	Industry Webinar: Production Readiness Testing	March 4, 2020
Industry Test Release 1.4	Industry Test Release of: - CAT Reporter Portal Announcements & System Status	March 23, 2020
Industry Call: Industry Testing Checkpoint	Daily Industry Testing Checkpoint Calls at 4:15 pm (ET)	March 23, 2020 – April 3, 2020

The timeline of Phase 2a/2b Release 1 (File Validation & Data Integrity) can be found at <https://catnmsplan.com/timelines/phase-2a-2b-release.html>

Upcoming Key Dates for Release 2a/2b

Topic	Event	Date
Industry Test Certification	Industry Members and CAT Reporting Agents must complete production readiness testing for 2a reporting	April 6, 2020
Industry Call: Industry Testing Checkpoint	Weekly Industry Testing Checkpoint Calls - Every Tuesday at 4:15 pm (ET)	April 6, 2020 – May 1, 2020
Production Readiness	Production Environment Opens for Production Readiness	April 13, 2020
Production Go-Live	Production Go-Live for Equities 2a file submission and data integrity validations	April 20, 2020
Industry Call: Production Release Checkpoint	Industry Call - Status of 2a Go-Live	April 21, 2020
Industry Test Certification	Industry Members and CAT Reporting Agents must complete production readiness testing for 2b reporting	May 4, 2020
Industry Call: Industry Testing Checkpoint	Daily Industry Testing Checkpoint Calls at 4:15 pm (ET)	May 4, 2020 – May 15, 2020
Production Go-Live	Production Go-Live for Options 2b file submission and data integrity validations	May 18, 2020
Industry Call: Production Release Checkpoint	Industry Call - Status of 2b Go-Live	May 19, 2020
Industry Webinar and Demo	Industry Webinar and Demo of Compliance Report Card	June 2, 2020
Production Go-Live	Release of Industry Member Compliance Report Card for Equities ONLY	June 19, 2020
Production Go-Live	Release of Industry Member Compliance Report Card including Equities and Options	July 20, 2020

How to Ask a Question during Today's Call

- **For participants using computer audio:**
 - Click the “Participants” button at the bottom of the app window, then 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.

Industry Member Release 1.3 (February 24, 2020)

Key Features

- File Submissions feedback
- Comprehensive Statistics (i.e. number of records received, accepted, rejected and feedback summaries)
 - Aggregations by Trade Date and Process Date
 - Perspective and distinction for Submitter and CAT Reporter
 - Summaries by Equities and Options
 - Error Rates adjusted for corrections
- Create CAT Events
- View Errors (Summary and Detail)
- Correct Errors including Group Repair

Ongoing Enhancements

- Continuous enhancements to improve user experience across all screens
- Increasing volume limits for Group Repairs
- Enabling export functionality on additional screens
- Additional validations for Create Events and Error Corrections
- Addition of user preferences and ability to carry key fields on secondary events

Demo Use Case #1 – View Feedback

- Perspective of a user that has submitted data on behalf of his firm and on behalf of another firm that has authorized the user to submit data
- User now logging in to review feedback and statistics on Reporting Feedback
 - Aggregations by Trade Date and Process Date
 - Perspective and distinction for Submitter and CAT Reporter
 - Summaries by Equities and Options
 - Error Rates adjusted for corrections

Demo Use Case #2 – Submission of CAT Events

- User submitting online via data entry
 - Creating a CAT Event
 - Verifying Pending Submission
 - Final Submission

Demo Use Case # 3 – Reviewing/Correcting Errors

- User Reviewing, Analyzing and Making Error Corrections
 - Review Error Summary
 - Analyze Errors
 - Correct via Error Correction
 - Correct via Group Repair
 - Verify Pending Submission
 - Final Submission
 - Review updated Error Status

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Reporting Feedback

Reporting Summary

Event Type Counts

File Status

☒ Processing Date ☐ Trade Date

Product Type

IMID

2/14/2020

ALL

ALL

APPLY

RESET

Export

Adjusted Error Rate

62.9310%

File Submissions

Show Details

Valid Files Submitted	Data Files Received	Data Files Accepted	Data Files Rejected	Metadata Files Received	Metadata Files Rejected	Invalid Files
16	8	8	0	8	0	0

Event Submissions

Hide Details

Processed	Accepted	Accepted Warnings	Accepted Late	Accepted Corrections	Rejected	Repairable Rejections	Repaired	Initial Error Rate	Adjusted Error Rate
116	25	0	4	14	91	91	22	81.8966%	62.9310%

IMID	Submitter Id	Processed	Accepted	Accepted Warnings	Accepted Late	Accepted Corrections	Rejected	Repairable Rejections	Repaired	Initial Error Rate	Adjusted Error Rate
CAT12	99999999	1	1	0	1	1	0	0	0	100.0000%	100.0000%
ZZZT1	99999999	115	24	0	3	13	91	91	22	81.7391%	62.6087%

Reporting Feedback

Reporting Summary

Event Type Counts

File Status

☒ Processing Date

☐ Trade Date

Product Type

IMID

2/14/2020

ALL

ALL

APPLY

RESET

Export

Event Submission By Type			Processed	Processed COR	Processed RPR	Processed DEL	Accepted	Accepted Late	Rejected
			116	2	10	2	25	4	91
IMID	Submitter ID	Event Type							
CAT12	99999999		1	0	1	0	1	1	0
ZZZT1	99999999		115	2	9	2	24	3	91
		MENO	34	2	5	0	9	2	25
		MEOA	4	0	0	0	0	0	4
		MEOC	2	0	0	0	0	0	2
		MEOM	4	0	2	0	2	0	2
		MEOR	37	0	2	0	4	1	33
		MOCO	3	0	0	0	1	0	2
		MOCOC	2	0	0	0	1	0	1
		MOCOM	3	0	0	0	1	0	2
		MOFA	4	0	0	0	0	0	4

* N/A indicates Event Type value was either not required (for DEL action) or invalid

Reporting Feedback

Reporting Summary

Event Type Counts

File Status

Processing Date

IMID

2/14/2020

ALL

APPLY

RESET

Export

Submitter ID	CAT Reporter IMID	User ID	Uploaded Filename	Paired Metadata Filename	Upload Timestamp	Upload Method
99999999	ZZZT1	portaltest99999...	99999999_ZZZT1_20200216_catweb_Order...	99999999_ZZZT1_20200216_catweb_Order...	02/16/2020 09:38:48	WEB
99999999	ZZZT1	portaltest99999...	99999999_ZZZT1_20200216_catweb_Order...		02/16/2020 09:38:48	WEB
99999999	ZZZT1	portaltest99999...	99999999_ZZZT1_20200214_Options_Order...	99999999_ZZZT1_20200214_Options_Order...	02/14/2020 20:33:50	WEB
99999999	ZZZT1	portaltest99999...	99999999_ZZZT1_20200214_Options_Order...		02/14/2020 20:33:50	WEB
99999999	ZZZT1	catdcftp99999999	99999999_ZZZT1_20200214_NS34SFTP_Or...		02/14/2020 19:50:31	SFTP
99999999	ZZZT1	catdcftp99999999	99999999_ZZZT1_20200214_NS34SFTP_Or...	99999999_ZZZT1_20200214_NS34SFTP_Or...	02/14/2020 19:50:04	SFTP
99999999	ZZZT1	portaltest99999...	99999999_ZZZT1_20200214_NS39Late_Ord...	99999999_ZZZT1_20200214_NS39Late_Ord...	02/14/2020 19:30:16	WEB

Reporting
FeedbackError
Corrections

Report to CAT

Reporting
RelationshipsATS Order
Types

Report to CAT

File Upload

Download Feedback

Create CAT Events

Pending Submissions

1

actionType

2

errorROEID

3

firmROEID

4

type

5

CATReporterIMID

NEW

20200214_ZZZZ

New Order Supplement Event (MENOS)

ZZZT1

CREATE

Instructions

The [Technical Specifications](#) section of [catnmsplan.com](#) provides detailed guidance and validation requirements for creating new events in CAT.

After clicking Submit below, your event will be added to the **Pending Submissions** page. From there you may edit or delete the event and submit it to CAT for processing.

To clear the form and start over click Cancel or simply navigate away from the **Create CAT Events** tab.

9

originatingIMID

10

eventTimestamp *

20200214

T

000000

.

CCCNNNNNN

11

aggregatedOrders

orderID *

orderKeyDate *

quantity

originatingIMID

X

OrderID_AAA

20200214

T

000000

.

CCCNNNNNN

X

OrderID_BBB

20200214

T

000000

.

CCCNNNNNN

ADD

12

firmDesignatedID

CANCEL

SUBMIT

Reporting
FeedbackError
Corrections

Report to CAT

Reporting
RelationshipsATS Order
Types

Report to CAT

File Upload

Download Feedback

Create CAT Events

Pending Submissions



Creating and repairing CAT events via the Reporter Portal is a two-step process. First, users must create new CAT events or repair error records. Second, users must submit the pending events from this page to CAT for processing. Users will be given the option to download submitted files during the submission process. After the submission process is complete, events are no longer available for Download.

Pending submissions (3)

Delete	Type	Error ROE ID	Firm ROE ID	CAT Reporter IMID	Order ID	Trade ID	Quote ID	Fulfillment ID	Event
×	RPR	4121924488302	20200214_101-...	ZZZT1	OrdID_12345678...				20200214_101-...
×	RPR	4121924488293	20200214_101-...	ZZZT1	OrdID_12345678...				20200214_101-...
×	NEW		20200214_ZZZZ	ZZZT1	OrderID_789				20200214_ZZZZ



SUBMIT

Error Corrections

Error Summary

Error Search

☒ Processing Date ☐ Trade Date

Product Type

IMID

2/14/2020

ALL

ALL

APPLY

RESET

Error Summary (40)

IMID	Submitter ID	Error Type	Repair Status	Repair Type	Error Code	Error Reason	Group Repair Eligible	Error Count*
	99999999	REJECTION	U		2105	Missing or Invalid type		2
	99999999	REJECTION	U		2126	Missing or Invalid orderID in firmDetails		1
	99999999	REJECTION	U		2127	Missing or Invalid orderKeyDate in firm...		4
	99999999	REJECTION	U		2128	Missing or Invalid side in firmDetails		1
	99999999	REJECTION	U		2133	Additional fields are specified in the re...		2
	99999999	REJECTION	U		2134	Invalid JSON or CSV format		4
	99999999	REJECTION	U		2144	Invalid combination of electronicTime...		4
	99999999	REJECTION	U		2149	CATReporterIMID and senderIMID mus...		4
	99999999	REJECTION	U		2095	Missing or Invalid side	Y	5

* Sum of Error Count values may not match total Rejections; each submission may be rejected for more than one reason.

Reporting
FeedbackError
Corrections

Report to CAT

Reporting
RelationshipsATS Order
Types

Error Corrections

Error Summary

Error Search



Processing Date



Trade Date

Product Type

IMID

2/14/2020



ALL

ALL

APPLY

RESET

Total Errors (4)

Error ROE ID	Firm ROE ID	Error Code	Error Reason	Error Type	Repair Status	CAT Reporter CRD	CAT Reporter IMID
4121924488211	20200212_dupROID3-100...		MULTIPLE ERRORS	REJECTION	U	99999999	ZZZT1
4121924488213	20200212_errROEID5-100...		MULTIPLE ERRORS	REJECTION	U	99999999	ZZZT1
4121924488250	20200213_dupROID3-100...		MULTIPLE ERRORS	REJECTION	U	99999999	ZZZT1
4121924488252	20200213_errROEID5-100...		MULTIPLE ERRORS	REJECTION	U	99999999	ZZZT1

- Reporting Feedback
- Error Corrections
- Report to CAT
- Reporting Relationships
- ATS Order Types

Error Corrections

Error Summary

Error Search

Group Repair

Group Repair

Error Code	Error Reason	Error Count	Corrected Value*	
2095	Missing or Invalid side	5	<div>B</div> <div>SL</div> <div>SS</div> <div>SX</div>	<div>REPAIR</div> <div>CANCEL</div>

Reporting
FeedbackError
Corrections

Report to CAT

Reporting
RelationshipsATS Order
Types

Error Corrections

Error Summary

Error Search

Error Repair: 4121924488211

1	actionType	2	errorROEID	3	firmROEID	4	type	5	CATReporterIMID
	NEW				20200212_dupROID3-1000C		Order Route Event (MEOR)		ZZZT1

Errors (4)

- 14 [CATReporterIMID and senderIMID must be assigned to the same firm](#)
(error value: SGMT)
- 24 [Missing or Invalid timelnForce](#)
- 28 [Invalid handlingInstructions](#)
- 30 [Missing or Invalid dupROIDCond](#)
(error value: true)

24	timelnForce *	DAY	YYYYMMDD	
25	tradingSession *	PREPOST		
26	affiliateFlag *	<input type="radio"/> true <input checked="" type="radio"/> false		
27	isolnd *	ISOI		
28	handlingInstructions	DISQ	1000	

CANCEL

REPAIR

Reporting
FeedbackError
Corrections

Report to CAT

Reporting
RelationshipsATS Order
Types

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Create CAT Events

Pending Submissions



Creating and repairing CAT events via the Reporter Portal is a two-step process. First, users must create new CAT events or repair error records. Second, users must submit the pending events from this page to CAT for processing. Users will be given the option to download submitted files during the submission process. After the submission process is complete, events are no longer available for Download.

Pending submissions (3)

Delete	Type	Error ROE ID	Quote ID	Fulfillment ID	Event
×	RPR	4121924488302			20200
×	RPR	4121924488293			20200
×	NEW				20200

Event Submission

3 Records have been submitted to CAT.

2 Files were created.

To download the files, click Download button below.

DOWNLOAD

CLOSE

SUBMIT

FINRA CAT Helpdesk

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