Monthly CAT Implementation Update

November 19, 2020

Agenda

- State of the CAT
- CAT NMS Plan, Exemptive Relief and Interpretive Updates
- Technical Specification Updates
- CAIS/LTID Reporting
- Compliance
- Upcoming Industry Webinars and Other Updates
- Q&A

State of the CAT

Validations Live In Compliance Period

Phase 2a (Equities)		Phase 2b (Options)			
Validation	Compliance Go-Live Date	Validation	Compliance Go-Live Date		
Late, Data Integrity	June 22, 2020	Late, Data Integrity	July 20, 2020		
Intrafirm Linkage	July 27, 2020	Intrafirm Linkage	August 24, 2020		
Interfirm, Exchange and TRF	October 26, 2020				

Statistics In Compliance Period

Equities (October 26, 2020-November 13, 20	20)	Options (October 12, 2020-November 13, 2020)		
# of Firms Submitting	1,203	# of Firms Submitting	739	
Avg. Daily Volume	17.4B	Avg. Daily Volume	1.4B	
Avg. Daily Late %	1.27%	Avg. Daily Late %	2.35%	
Avg. Daily Rej %	0.01%	Avg. Daily Rej %	0.03%	
Avg. Daily Intrafirm Unlinked %	0.00%	Avg. Daily Intrafirm Unlinked %	0.16%	
Avg. Daily Interfirm Sent Unlinked %	0.67%	Avg. Overall Daily Error Rate	2.47%	
Avg. Daily Interfirm Received Unlinked %	0.42%			
Avg. Daily Exchange Unlinked %	0.50%			
Avg. Daily TRF Unlinked %	1.08%			
Avg. Overall Daily Error Rate	1.51%			

Options - Production Statistics October 26 - November 13, 2020

October 26 – October 30, 2020

							Initial	Initial	
		Total Weekly					Interfirm	Interfirm	Initial
	Firm	Aggregate Accepted		Initial Rejection	Initial Intrafirm	Initial Error	Sent	Received	Exchange
Product Type	Count	Count	Late %	%	Unlinked %	%	Unlink %	Unlink%	Unlink %
Options	668	7,175,313,685	.3923%	.0118%	.0179%	.4148%	3.5733%	7.2603%	34.1230%

November 2 – November 6, 2020

							Initial	Initial	
		Total Weekly					Interfirm	Interfirm	Initial
	Firm	Aggregate Accepted		Initial Rejection	Initial Intrafirm	Initial Error	Sent	Received	Exchange
Product Type	Count	Count	Late %	%	Unlinked %	%	Unlink %	Unlink%	Unlink %
Options	679	6,693,852,486	1.9533%	.0028%	.3365%	2.1592%	.2551%	2.8765%	33.9558%

November 9 – November 13, 2020

							Initial	Initial	
		Total Weekly					Interfirm	Interfirm	Initial
	Firm	Aggregate Accepted		Initial Rejection	Initial Intrafirm	Initial Error	Sent	Received	Exchange
Product Type	Count	Count	Late %	%	Unlinked %	%	Unlink %	Unlink%	Unlink %
Options	684	9,384,187,623	1.3374%	.0305%	.1905%	1.4823%	.2780%	28.7287%	35.6297%

Upcoming Phase 2b Compliance Dates

Phase 2b (Options)						
Validation	Available in Test Environment	Available in Production Environment	Compliance Go-Live Date			
Interfirm Linkage	July 27, 2020	August 10, 2020	January 4, 2021			
Exchange Linkage	September 9, 2020	September 28, 2020	January 4, 2021			

Phase 2c Cutover Overview

- On November 17, 2020, Consolidated Audit Trail, LLC and FINRA CAT, LLC hosted an <u>industry webinar</u> focused on two topics. The first part of the webinar provided an overview of the transition from Phase 2a/2b to Phase 2c CAT reporting as it relates to schema changes, timing and other related issues.
- Important Cutover Dates

Date	Description
By December 30, 2020	Updated Connectivity Guides will be published
January 26, 2021	Phase 2c testing begins in the current Test Environment
Mid-January 2021	Phase 2a/2b testing will be moved to a new Prod-Mirror Environment
April 26, 2021	Beginning at approximately 8 am ET, all Data Submissions must be in the Phase 2c Format, including lates and repairs/corrections for events that originated prior to April 26, 2021

Another industry webinar will be scheduled to discuss other details related to the Phase 2c cutover.

Interfirm Linkage Updates

- ▶ Interfirm unmatched rates for equities and options are less than 1%
- ▶ FINRA CAT shares statistics, observations and suggested best practices on the Weekly Industry Testing Checkpoint Call
- Compliance date was October 26, 2020 for equities and is January 4, 2021 for options
- Resources:
 - Interfirm Linkage Overview (7/22/2020)
 - Interfirm Linkage Overview (8/12/2020)
 - Interfirm Linkage Overview (8/19/2020)

Exchange Linkage Update

- Exchange unmatched rates are approximately:
 - Less than 1% for equities exchanges
 - 33% for options exchanges
- Options Exchange Linkage- areas to focus on:
 - Sender IMID is now the largest source of forward errors. It is necessary for Industry Members to work directly with each exchange to ensure both the IM and the exchange are reporting the same IMID to CAT.
- FINRA CAT shares statistics, observations and suggested best practices on the Weekly Industry Testing Checkpoint Call
- Compliance date was October 26, 2020 for equities and is January 4, 2021 for options
- Resources:
 - Plan Participant Contact List
 - Industry Members should first contact the FINRA CAT Helpdesk for assistance in identifying and troubleshooting the causes of unlinked events. The Plan Participant Contact List is provided as an additional secondary resource for questions related to the market center's CAT linkage keys once the unlinked reason has been identified, with the assistance of the FINRA CAT Helpdesk, if necessary.
 - Updated on 10/28/20: Order Routing Field Mapping between CAT and Exchanges
 - Updates for population of senderIMID field for MIAX PEARL Equities
 - Section 2.4.1 of the Technical Specifications for Industry Members
 - Exchange Route Matching Industry Webinar (9/16/20)

TRF Linkage Update

- ▶ TRF unmatched rates are approximately 1%
- FINRA CAT shares statistics, observations and suggested best practices on the Weekly Industry Testing Checkpoint Call
- Compliance date was October 26, 2020
- Resources:
 - Section 2.4.1 of the <u>Technical Specifications for Industry Members</u>
 - TRF Linkage Industry Webinar (9/29/20)

CAT NMS Plan, Exemptive Relief and Interpretive Updates

Amendments

None since the last Monthly CAT Implementation Update (October 15, 2020)

Exemptive Relief Requests and Orders

- On October 19, 2020, the SEC issued <u>conditional exemptive relief</u>
 regarding certain allocation reporting requirements set forth in Sections
 6.4(d)(ii)(A)(1) and (2) of the CAT NMS Plan.
- On November 12, 2020, the SEC issued an order granting temporary exemptive relief from certain requirements in Section 6.4(d) of the CAT NMS Plan relating to certain activities on the floors of national securities exchanges and certain activities by Industry Members off exchange floors. The relief expires on July 31, 2023.

New FAQs

- New FAQs published since the last Monthly CAT Implementation Update (October 15, 2020). Highlights include:
 - New FAQs A34 and Q38 regarding the addition of Legal Entity Identifier ("LEI") on the CAT Transaction and CAT CAIS Registrations Forms
 - New FAQ B66 regarding when the Order Effective event/Option Order Effective event (MEOE/MOOE) is required and when it is not required
 - New FAQ B67 regarding reporting requirements when the exact stop price is unknown
 - New FAQ D34 regarding the party responsible for reporting default or implicit handling instructions
 - New FAQ D35 regarding use of the 'SMT' (Smart Router) handlingInstructions
 - New FAQ K14 regarding the reporting of equities contingent on options
 - New FAQ U23 regarding the definition of "booking" in relation to the reporting of CAT allocation events

FAQ Updates

- ▶ 14 Updated FAQs published since the last Monthly CAT Implementation Update (October 15, 2020):
- Updated FAQ B37 regarding how buy-ins should be reported
- Updated FAQs B57 and B59 regarding the reporting requirements for Stop, Stop Limit, Stop on Quote, Stop Limit on Quote, Trailing Stop, and Trailing Stop Limit orders
- Updated FAQ D29 regarding the handling instructions 'ALG' and 'ALGMod'
- Updated FAQ D30 regarding default or implicit handling instructions
- Updated FAQ J2 regarding the CAT reporting responsibilities with respect to OTC Link messages
- No change in guidance:
 - Updated FAQ B12 regarding reporting the equity leg of a complex order (added reference to FAQ E13)
 - Updated FAQ B60 detailing which party must report the Order Effective event/Option Order Effective event (MEOE/MOOE) to CAT (only language clarification)
 - Updated FAQ B62 regarding CAT reporting requirements for Trailing Stop orders (only language clarification)
 - Updated FAQ B63 regarding the initiator field (only language clarification)
 - Updated FAQ D24 regarding direct market access (only language clarification)
 - Updated FAQ D26 regarding the 'CND' and 'CMC' handlingInstructions (only language clarification)
 - Updated FAQ Q4 regarding the LEI associated with Customer information (only language clarification)
 - Updated FAQ Q13 regarding ItidEffectiveDate (added reference to FAQ Q3)

Technical Specification Updates

Technical Specification Updates

- New versions of the Phase 2a/2b, Phase 2c and Phase 2d Technical Specifications were published on November 6, 2020
- New versions of the Phase 2a/2b and Phase 2c Industry Member Schemas were published on November 12, 2020
- An overview of the Technical Specifications updates was presented on November 17, 2020 in the Industry Webinar, Phase 2c Cutover and November 2020 Technical Specifications Overview
- Between publications, the Planned Technical Specifications Updates list will be maintained on the <u>Technical Specifications</u> page of <u>www.catnmsplan.com</u>
- Updates to the Technical Specifications will be published on the first Friday of each month. The next publication will be December 4, 2020

Reporting Scenarios Updates

- New versions of Phase 2a/2b and Phase 2c Reporting Scenarios documents were published on November 6, 2020
- An overview of the Reporting Scenarios updates was presented on November 17, 2020 in the Industry Webinar, Phase 2c Cutover and November 2020 Technical Specifications Overview

CAIS/LTID Reporting

CAIS LTID Timeline

08/20/2020
CAIS LTID Registration
Begins

08/24/2020
CAIS LTID Industry
Test Environment
Opens

10/05/2020 CAIS LTID Certification Opens

12/14/2020 CAIS LTID Production Opens 4/26/2021 CAIS LTID Mandatory Reporting

Industry Test Status CAIS LTID – As of November 17th, 2020

Item	Statistic
Number of Firms Registered	550 (thru 11/12)
Number of Firms Certified	1 (thru 11/12)
Number of Total Submitters	19
Number of Unique Firms	15
Number of Files Received	120Reporter Portal: 74SFTP: 46
Number of Files Rejected	34
File Reject Rate	28.33%

CAIS LTID Registration and Onboarding

- CAIS registration remains open
 - Reporters that have no accounts with associated LTIDs to report at this time are still encouraged to complete the registration process in order to quickly and efficiently onboard in the future if and when necessary
- CAIS LTID Production Certification opened on October 5, 2020 and remains open
- ▶ The <u>Industry Member CAIS Onboarding Guide</u> was updated on November 4, 2020
 - Updated to include the collection of the Legal Entity Identifier ("LEI")
 - Updated to reflect CAIS Release 1.1 updates for setting access to Industry Test and Production Environments
- ▶ The <u>CAT CAIS Reporter Portal User Guide</u> was updated on November 4, 2020
 - Added "Entity ID" as an acceptable FDID Type value
 - Added guidance on aggregated statistics functionality for the submission report
 - Included Test versus Production Environment access information for CAIS Release 1.1.

Other CAIS Resources

- On September 22, 2020 v1.1.2 of the CAT CAIS Reporting Scenarios were published on the <u>Reporting Scenarios</u> section of cathmsplan.com
- On October 14, 2020, Consolidated Audit Trail, LLC and FINRA CAT, LLC published a video tutorial, <u>How to Access the CAT CAIS Reporter Portal</u>
- ▶ The next Monthly CAIS/LTID Industry Testing Checkpoint Call is December 9, 2020

Compliance

Clock Synchronization Updates

- CAT Alert 2020-02: Standards For Self Reporting Deviations of Clock Synchronization Standards to FINRA CAT was updated on October 19, 2020 to clarify when filing is required, and that Plan Participants are required to submit self-reporting forms
- ▶ The <u>Self-reporting Violations Of Clock Synchronization Standards</u> form was updated on October 19, 2020 to add MEMX to the form

Report Card Updates

- Report Cards will be made available on a rolling basis in line with compliance dates for Phase 2a validation releases
- On November 16, 2020, the October 2020 Industry Member Report Cards were published
- Linkage statistics under compliance on October 26, 2020 will be added to the November Report Card as it will be the first full month of compliance
- On Wednesday, December 16, 2020 at 3:30 pm ET, Consolidated Audit Trail, LLC and FINRA CAT, LLC will host an <u>industry webinar</u> to provide an overview of the November 2020 Industry Member Compliance Report Card with addition of Interfirm, Exchange and TRF reporting statistics for equities

Resources:

- Updated Industry Member Compliance Glossary
- Industry Member Compliance Report Card Webinar

Compliance Error Rate Calculation

Effective October 26, 2020, the Daily Compliance Error Rates on the Reporter Portal Reporting Summary screen are calculated as follows:

Product Type	Calculation
Equities	(Accepted Late + Outstanding Rejections (Ingestion and Intrafirm) + Outstanding Intrafirm Unlinked Events + Outstanding Out of Sequence Events + Outstanding Interfirm Unlinked Events + Outstanding Exchange Unlinked Events + Outstanding TRF Unlinked Events)/Total Processed
Options	(Accepted Late + Outstanding Rejections (Ingestion and Intrafirm) + Outstanding Intrafirm Unlinked Events + Outstanding Out of Sequence Events)/Total Processed
ALL	{(Accepted Late + Outstanding Rejections (Ingestion and Intrafirm) + Outstanding Intrafirm Unlinked Events + Outstanding Out of Sequence Events + Outstanding Interfirm Unlinked Events + Outstanding Exchange Unlinked Events + Outstanding TRF Unlinked Events) for Equities} + {(Accepted Late + Outstanding Rejections (Ingestion and Intrafirm) + Outstanding Intrafirm Unlinked Events + Outstanding Out of Sequence Events) for Options}/Total Processed

- The records counted in the numerator of the Daily Compliance Error Rate are a distinct count of Events. For example, if a record that is reported late has an out of sequence event and an interfirm unlinked event, then it will be counted only once in the Daily Compliance Error Rate.
- Named Errors do not participate in Compliance Error Rate.

Compliance Error Rate Calculation

- Daily Statistics include initial error rates for rejections and unlinked data. An adjusted error rate is also displayed, which is an updated error rate reflecting initial errors minus repairs and corrections submitted.
- Report Cards statistics are based on trade date reporting and error rates are adjusted up to the 5th processing date of the following month.

For example: Industry Member receives rejection on October 30 and repairs the rejection on November 6 (which is the 5th processing date in November). In this example, the October Report Card error rate statistics will include the repair on November 6.

Any submissions after the 5th processing date of the month, including corrections or repairs, would not affect the report card statistics for the previous month.

Upcoming Industry Webinars and Other Updates

Upcoming Industry Webinars

On Wednesday, December 16, 2020 at 3:30 pm ET, Consolidated Audit Trail, LLC and FINRA CAT, LLC will host an <u>industry webinar</u> to provide an overview of the November 2020 Industry Member Compliance Report Card with addition of Interfirm, Exchange and TRF reporting statistics for equities

Legal Entity Identifier ("LEI") for Industry Members

- The CAT Transaction Registration Form and CAT CAIS Registration Form both contain a new question asking for a Legal Entity Identifier ("LEI").
- The CAT NMS Plan requires Industry Members to "submit to the Central Repository" information sufficient to identify such Industry Member "including CRD number and LEI, if such LEI has been obtained."
- The CAT NMS Plan requirement does not require Industry Members to obtain an LEI, but rather to provide its LEI to the Plan Processor (FINRA CAT) if the Industry Member does have an LEI.
- The collection of the Industry Member's LEI via the CAT Transaction Registration Form and CAIS Registration Form is separate from the reporting of customer account LEI data requirements.

Other Updates

- The <u>Industry Member Transaction Onboarding Guide</u> was updated on November 4, 2020
 - Updated to include the collection of the Legal Entity Identifier ("LEI")
- Recent Industry Webinars:
 - On November 17, 2020, Consolidated Audit Trail, LLC and FINRA CAT, LLC hosted an industry webinar focused on two topics. One part of the webinar focused on the transition from Phase 2a/2b to Phase 2c CAT reporting as it relates to schema changes, timing and other related issues. The second part of the webinar focused on the November 2020 updates to the Phase 2a/2b, Phase 2c and Phase 2d Industry Member Technical Specifications.
 - On October 21, 2020 Consolidated Audit Trail, LLC and FINRA CAT, LLC hosted an <u>industry</u> webinar with a specific focus on Industry Members serving as an outbound router on behalf of an NMS Exchange.

Reminders

- There are two versions of the Options Start of Day and End of Day symbol files, one with the Test Option Series flag identifying options test symbols and one without the test flag. Existing versions of the files without the test flag will continue to be available until December 14, 2020, when they will be retired. Firms that use these files should plan to transition to the new versions prior to that time.
- Workstations running end-of-life operating systems will be blocked from accessing CAT applications effective Monday, December 7, 2020. After that date, users will not be able to access CAT applications with the affected system until it is upgraded to a supported version of the operating system. All impacted users have been sent notification emails.

Q&A

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