
Part 1: Full CAIS Error Repairs and Corrections

August 2, 2022

Agenda

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- Feedback and Error Correction Availability
- Overview of CAIS Reporting Errors
- Sample Data Validation Error Repair Scenarios
- Key Dates
- CAIS Resources
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Disclaimer

Note: All CRD numbers, names, addresses, and identifiers data used for examples in the Customer and Account information reports are purely fictional for illustrative purposes only. Any resemblance to actual persons, organizations, or locations is purely coincidental. All Transformed Identifiers (“TIDs”) included in the examples for Social Security Numbers, Individual Taxpayer Identification Numbers, or Employer Identification Numbers (collectively, ‘SSN/ITIN’ and ‘EIN’), are generated from values that are outside of the acceptable range of assignment by the assigning body and would fail CAT data validations if reported to CAIS.

Scope of Part 1 and Part 2

Part 1: Error Repair and Corrections

- ▶ The focus of today's webinar is on Error Repair and Industry Member-Identified Corrections.
- ▶ Errors are identified by CAT when validating files and records, are provided in feedback and are required to be repaired.
- ▶ Corrections are made to previously accepted records, are self-identified by the Industry Member and are required to be corrected.
 - There is no associated feedback for corrections.
 - Examples:
 - An incorrect field value that passed validation, such as a correctly formatted *accountName* that the Industry Member later determined was incorrect.
 - A field value that must be updated, such as a change in address.

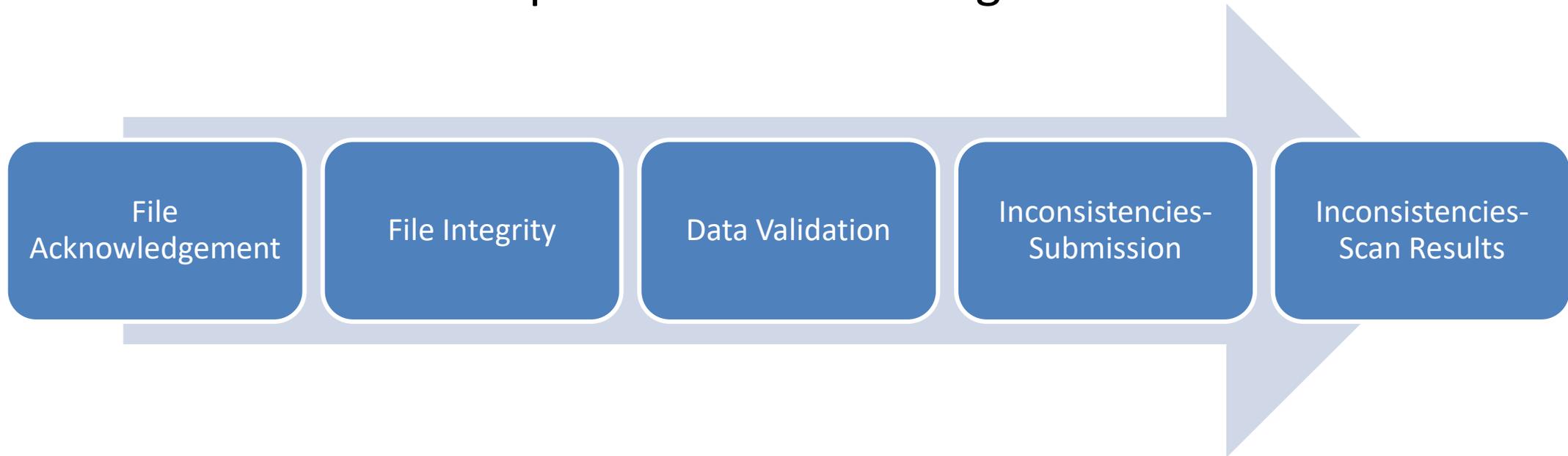
Part 2: Material Inconsistencies

- ▶ Part 2 will be presented tomorrow, and the focus will be on Material Inconsistencies and Material Inconsistency Resolution.
- ▶ Material Inconsistencies are identified by CAT when Customer Records have passed validation checks (i.e., no errors were identified by CAT), but inconsistency scans have found inconsistent Customer data.
 - There is feedback associated with Material Inconsistencies and Industry Members that receive Material Inconsistency notifications must take action to resolve them.

Processing Stages

Processing Stages

- ▶ Files and records are processed in five stages:



- ▶ CAT provides feedback for all files and records submitted to CAIS.
- ▶ Feedback is available via SFTP and the CAT Reporter Portal – CAIS.

Feedback Available via SFTP

- ▶ CAIS reporting requires the submission of two files:
 1. The Data File which is submitted to the CAIS Data Subsystem; and
 2. The Transformed Identifiers File which is submitted to the CCID Subsystem.
- ▶ These two separate subsystems are utilized for CAIS reporting to ensure the separation of the Customer and Account data submissions from the Transformed Identifiers File.
- ▶ Feedback must be obtained from each subsystem.
 - Feedback files for CAIS Data submissions will be accessible under the cat/cais/feedback directory in the Submitter's home directory on the Feedback SFTP server.
 - Feedback files for Transformed Identifier submissions will be accessible under the cat/tid/feedback directory in the Submitter's home directory on the Feedback SFTP server.

Feedback and Error Correction Availability

Feedback and Error Correction Availability

Seq	Processing Stage	Feedback	Anticipated Delivery	Delivery No Later Than
1	File Acknowledgement	File Acknowledgement Status	Within 10 minutes of File Submission	1 hour of File Submission
2	File Integrity	File Integrity Error Status or File Integrity Passed Status	Within 30 minutes of File Submission	2 hours of File Submission
3	Data Validation	Data Errors including syntax and semantic errors	Within 1 hour of File Integrity Feedback	4 hours of File Integrity Feedback
4	Inconsistencies –Submission	Customer Data Inconsistencies	Within 1 hour of Data Validation	6 hours of File Integrity Feedback
5	Inconsistencies – Scan Results	Inconsistency Scan Results	Nightly	Nightly

- ▶ Some Industry Members and Submitters have not received feedback within these timeframes.
- ▶ IM Release 4 went into Production on July 1, 2022 and included CAIS file processing improvements.
- ▶ IM Release 5 will go into Production on September 26, 2022 and will include further CAIS file processing improvements.

Error Repair Deadlines

Repair Deadline for Errors Identified by CAT CAIS

- ▶ For data submitted on time (by 8:00 a.m. ET), errors will be identified by CAT CAIS and provided to Industry Members no later than 5:00 p.m. ET.
- ▶ Once available, repairs can be made immediately.
- ▶ All repairs must be submitted by 5:00 p.m. ET on the third Trading Day after the Customer or Account information became available to the Industry Member.*
- ▶ Repairs received after the repair deadline will be accepted but considered late.

*Error Repair deadlines will be enforced effective December 12, 2022

Reporting and Repair Deadlines

			Transaction/Order Events	Customer and Account Data
Event Occurs/Received Industry Member Data	Holiday	Initial Report Due (T+1)	Transaction Repair Due (T+3)	CAIS Repair Due (T+3)
Monday 14:20 PM ET	N/A	Tuesday 8:00 AM ET	Thursday 8:00 AM ET	Thursday 5:00 PM ET
Monday 23:40 PM ET	N/A	Wednesday 8:00 AM ET	Friday 8:00 AM ET	Friday 5:00 PM ET
Friday 11:00 AM ET	N/A	Monday 8:00 AM ET	Wednesday 8:00 AM ET	Wednesday 5:00 PM ET
Friday 16:02 PM ET	N/A	Monday 8:00 AM ET	Wednesday 8:00 AM ET	Wednesday 5:00 PM ET
Friday 16:02 PM ET	Next Monday	Tuesday 8:00 AM ET	Thursday 8:00 AM ET	Thursday 5:00 PM ET
Wednesday 15:00 PM ET	Thursday, Friday is half day	Friday 8:00 AM ET	Tuesday 8:00 AM ET	Tuesday 5:00 PM ET
Saturday 11:15 AM ET	N/A	Tuesday 8:00 AM ET	Thursday 8:00 AM ET	Thursday 5:00 PM ET
Saturday 11:15 AM ET	The Following Monday	Wednesday 8:00 AM ET	Friday 8:00 AM ET	Friday 5:00 PM ET
Monday 10:00 AM ET (holiday)	On the Event Date	Wednesday 8:00 AM ET	Friday 8:00 AM ET	Friday 5:00 PM ET

Feedback and Error Repair

- ▶ For security reasons, full records are not returned in feedback to Industry Members or CAT Reporting Agents.
- ▶ Feedback includes sufficient information to identify the record with the error as well as the reason for the error.

Overview of CAIS Reporting Errors

Error Codes and Error Code Assignment

- ▶ All errors found during processing are provided in feedback with an Error Code or Warning Code.
- ▶ The associated description and explanation for each Code can be found in the Full CAIS Technical Specifications.
- ▶ Error Codes and Warning Codes are assigned in ranges to represent similar types of errors within the same range, related by validation type and/or by record type.
- ▶ Codes are organized by the CAT Processing stages:
 - File Integrity
 - Data Ingestion
 - Data Inconsistency Checking.

File Integrity Errors

File Integrity Errors– Overview

- ▶ File Integrity Errors are errors associated with files, filenames, and metadata within submission files, such as record count.
- ▶ File Integrity Errors produce an error in the 21000 range.
- ▶ Files rejected for File Integrity Errors will not proceed to the next processing stage (Data Validation).
- ▶ Data files that have a File Integrity Error will result in the paired Transformed Identifiers file also having a File Integrity Error; likewise, Transformed Identifiers files that have a File Integrity Error will result in the paired Data file also having a File Integrity Error.
- ▶ Files rejected for File Integrity Errors must be repaired, renamed and resubmitted.

Data Validation Errors

Data Validation Errors– Overview

- ▶ During data ingestion, records within the Data and Identifiers files are validated. Validations are performed to ensure correct syntax and semantics.
- ▶ Data Validation Errors produce errors in the 22000 range, 23000 range and 24000 range.
 - Records and values that fail validation (22000 and 23000 range) will be rejected and are required to be repaired.
 - The 24000 range contains Warning Codes associated with specific fields within a submission record and are not required to be repaired.
 - Warning Codes can be associated with an Error Code that does require repair.

Data Validation Errors– Other Important Concepts

- ▶ Any record within a file determined to be malformed or otherwise invalid will be individually rejected and will not cause a rejection of the entire file.
- ▶ If any Customer and/or LTID Record associated to an FDID is rejected due to data validation errors, the entire FDID Record will be rejected.
- ▶ For an FDID Record being submitted for the first time:
 - If the FDID Record is rejected, nothing will be stored in CAIS.
- ▶ For an FDID Record that was previously accepted by CAIS and is being resubmitted (for example, with updates, changes or additions):
 - If the FDID Record is rejected, no updates from the record will be stored in CAIS.
- ▶ Records submitted in version 1.0.0 (LTID Account Phase) and rejected, can be submitted in version 2.0.0 (Full CAIS Phase) and the rejections will be resolved.

How to Repair Data Validation Errors

- ▶ Excluding the two exceptions noted below, all Data Validation errors can be repaired by correcting the field(s) or field value(s) that triggered the error and resubmitting the same FDID Record (with all current Customer and LTID associations).
- ▶ Exceptions: Records that were rejected with Error Codes 22001 (Missing or Invalid FDID) and 22900 (Malformed TID record) must be repaired using the *correctionList*.
 - The field or field value that triggered the error must be corrected **and** the following fields in the *correctionList* must be included in the correcting submission:
 - *rejectionID*
 - *correctionAction* ('CORRECTION' or 'DELETE')
 - *correctingCustomerRecordID* (if correcting the Customer Record)
 - *correctingFirmDesignatedID* (if correcting a *firmDesignatedID*)

Industry Member–Identified Corrections

- ▶ Industry Members must correct self-identified errors in Customer and Account information that did *not* produce an error during processing.
- ▶ Industry Members must also update Customer and Account information defined by the Plan as “Received Industry Member Data”.
- ▶ Corrections and updates can be made at any time after original submission.
- ▶ Industry Member-initiated corrections and updates are made by submitting the same FDID Record (with all current Customer and LTID associations), with corrected or updated data.
- ▶ The new data provided on the corrected record will update the record currently stored in CAIS.

Sample Data Validation Error Repair Scenarios

Example 1: FDID Record Error on Original Submission

- ▶ Suppose that CRD 555 submitted an FDID Record to CAIS for the first time with no value in the *accountName* field.
- ▶ Since *accountName* is a required field, the entire FDID Record will reject with Error Codes 22050 (Missing or Invalid *accountName*) and 22523 (Customer Record rejected because an associated FDID was rejected).
- ▶ Nothing will be stored in CAIS for this FDID.

Example 1: Original Submission with Error

- ▶ (For ease of illustration, TIDs file not included)

fdidRecordList

fdidRecordID: 1
firmDesignatedID: 1A2042
fdidType: ACCOUNT
accountType: OTHER
accountName:
branchOfficeCRD: 99999
fdidDate: 20200701

addressList

addrType: ADDRESS1
addrLine1: 10 FIFTH AVE
addrLine2: SUITE 1000
city: BROOKLYN
regionCode: US-NY
countryCode: US
postalCode: 11201

fdidCustomerList

customerRecordID: 1
role: TRDHOLDER
roleStartDate: 20200701

naturalPersonCustomerList

customerRecordID: 1
firstName: Melanie
lastName: Smith
yearOfBirth: 1975
customerType: NOTAPPLICABLE

***Results in Error Codes 22050 (Missing or Invalid *accountName*) and 22523 (Customer Record rejected because an associated FDID was rejected).**

***Nothing will be stored in CAIS for this FDID Record submission.**

Example 1: Repairing Submission– Errors are Resolved

- ▶ (For ease of illustration, TIDs file not included)

fdidRecordList

fdidRecordID: 1
firmDesignatedID: 1A2042
fdidType: ACCOUNT
accountType: OTHER
accountName: CustAcct1
branchOfficeCRD: 99999
fdidDate: 20200701

addressList

addrType: ADDRESS1
addrLine1: 10 FIFTH AVE
addrLine2: SUITE 1000
city: BROOKLYN
regionCode: US-NY
countryCode: US
postalCode: 11201

fdidCustomerList

customerRecordID: 1
role: TRDHOLDER
roleStartDate: 20200701

naturalPersonCustomerList

customerRecordID: 1
firstName: Melanie
lastName: Smith
yearOfBirth: 1975
customerType: NOTAPPLICABLE

***Resubmission of the FDID Record with a present and properly populated *accountName* value resolves both Errors.**

***This record will be stored in CAIS.**

Example 2: Self-Identified Correction (Update) with Error on Updating Submission

- ▶ Suppose that Customer Melanie Smith changes her last name on her individual account.
- ▶ CRD 555 must update the *lastName* value stored in CAIS.
- ▶ In this sample scenario, the *lastName* was not included in the resubmitted Customer Record.
- ▶ Since *lastName* is a required field for the Customer Record, the entire record will reject with Error Codes of 22508 (Missing or Invalid *lastName*) and 22048 (The FDID Record is rejected because an associated Customer Record was rejected).
- ▶ No updates will be stored in CAIS for this record.

Example 2: Original Submission– Data Stored in CAIS

- ▶ (For ease of illustration, TIDs file not included)

fdidRecordList

fdidRecordID: 1
firmDesignatedID: 1A2042
fdidType: ACCOUNT
accountType: OTHER
accountName: CustAcct1
branchOfficeCRD: 99999
fdidDate: 20200701

addressList

addrType: ADDRESS1
addrLine1: 10 FIFTH AVE
addrLine2: SUITE 1000
city: BROOKLYN
regionCode: US-NY
countryCode: US
postalCode: 11201

fdidCustomerList

customerRecordID: 1
role: TRDHOLDER
roleStartDate: 20200701

naturalPersonCustomerList

customerRecordID: 1
firstName: Melanie
lastName: Smith
yearOfBirth: 1975
customerType: NOTAPPLICABLE

Example 2: Updating Submission with Error

- ▶ (For ease of illustration, TIDs file not included)

fdidRecordList

fdidRecordID: 1
firmDesignatedID: 1A2042
fdidType: ACCOUNT
accountType: OTHER
accountName: CustAcct1
branchOfficeCRD: 99999
fdidDate: 20200701

addressList

addrType: ADDRESS1
addrLine1: 10 FIFTH AVE
addrLine2: SUITE 1000
city: BROOKLYN
regionCode: US-NY
countryCode: US
postalCode: 11201

fdidCustomerList

customerRecordID: 1
role: TRDHOLDER
roleStartDate: 20200701

naturalPersonCustomerList

customerRecordID: 1
firstName: Melanie
lastName:
yearOfBirth: 1975
customerType: NOTAPPLICABLE

***Results in Error Codes of 22508 (Missing or Invalid *lastName*) and 22048 (The FDID Record is rejected because an associated Customer Record was rejected).**

***No updates will be stored in CAIS for this FDID record.**

Example 2: Repairing Submission– Both Errors are Resolved

- ▶ (For ease of illustration, TIDs file not included)

fdidRecordList

fdidRecordID: 1
firmDesignatedID: 1A2042
fdidType: ACCOUNT
accountType: OTHER
accountName: CustAcct1
branchOfficeCRD: 99999
fdidDate: 20200701

addressList

addrType: ADDRESS1
addrLine1: 10 FIFTH AVE
addrLine2: SUITE 1000
city: BROOKLYN
regionCode: US-NY
countryCode: US
postalCode: 11201

fdidCustomerList

customerRecordID: 1
role: TRDHOLDER
roleStartDate: 20200701

naturalPersonCustomerList

customerRecordID: 1
firstName: Melanie
lastName: Jones
yearOfBirth: 1975
customerType: NOTAPPLICABLE

***Resubmission of the record with a present and properly populated *lastName* value resolves both Errors.**

***The most recent submission to Full CAIS is stored as the current version of the record; prior submissions will be available to regulators.**

Example 3: Missing or Invalid FDID Error Repair Scenario

- ▶ Suppose that CRD 555 submitted an FDID Record to CAIS for the first time with no value in the *firmDesignatedID* field.
- ▶ Since *firmDesignatedID* is a required field, the entire FDID Record will reject with Error Codes 22001 (Missing or Invalid FDID) and 22523 (Customer Record rejected because an associated FDID was rejected).
- ▶ In this sample scenario, this rejection is assigned a *rejectionID* of 12345, which must be included in the *correctionList* in the repairing submission.
- ▶ Also, in this scenario, CRD 555 intends to repair the FDID Record, rather than delete it so it must populate the *correctionAction* field with 'CORRECTION'.
- ▶ Nothing will be stored in CAIS for this FDID unless it is repaired.

Example 3: Original Submission with Error

- ▶ (For ease of illustration, TIDs file not included)

fdidRecordList

fdidRecordID: 1
firmDesignatedID:
fdidType: ACCOUNT
accountType: OTHER
accountName: CustAcct1
branchOfficeCRD: 99999
fdidDate: 20200701

addressList

addrType: ADDRESS1
addrLine1: 10 FIFTH AVE
addrLine2: SUITE 1000
city: BROOKLYN
regionCode: US-NY
countryCode: US
postalCode: 11201

fdidCustomerList

customerRecordID: 1
role: TRDHOLDER
roleStartDate: 20200701

naturalPersonCustomerList

customerRecordID: 1
firstName: Melanie
lastName: Jones
yearOfBirth: 1975
customerType: NOTAPPLICABLE

***Results in Error Codes 22001 (Missing or Invalid FDID) and 22523 (Customer Record rejected because an associated FDID was rejected).**

***Nothing will be stored in CAIS for this FDID Record submission.**

Example 3: Repairing Submission– Errors are Resolved

- ▶ (For ease of illustration, the Data file is abbreviated and the TIDs file is not included)

fdidRecordList

fdidRecordID: 1
firmDesignatedID: 1A2042
fdidType: ACCOUNT
accountType: OTHER
accountName: CustAcct1
branchOfficeCRD: 99999
fdidDate: 20200701

addressList

addrType: ADDRESS1
addrLine1: 10 FIFTH AVE
addrLine2: SUITE 1000
city: BROOKLYN
regionCode: US-NY
countryCode: US
postalCode: 11201

correctionList

rejectionID: 12345
correctionAction: CORRECTION
correctingFirmDesignatedID: 1A2042

*The *correctingFirmDesignatedID* value must reference a corresponding *firmDesignatedID* that is either included in the current submission file or was accepted by CAT CAIS in a prior submission file.

*Submission of the *correctionList* with present and properly populated fields and values and the submission of the FDID Record with a present and properly populated *firmDesignatedID* resolves both Errors.

*This record will be stored in CAIS.

Full CAIS Reporting Scenarios

- ▶ Please see the Full CAIS Reporting Scenarios document for other illustrations of Data Validation Error Repair, Self-Identified Corrections and Material Inconsistency scenarios and scenarios depicting use of the *correctionList*.

Key Dates

CAIS Key Dates

Requirement	Date
Production Certification Deadline	July 25, 2022
Interim Reporting Obligation 1: CAT Submitters – Partial Submissions <ul style="list-style-type: none"> For a single date within the range specified, complete a scheduled partial submission to the Production Environment in Full CAIS Format. FINRA CAT began contacting CAT Submitters on August 1 to schedule their partial submission dates. 	August 15 – September 15, 2022
Interim Reporting Obligation 2: All Industry Members – Submission of all FDIDs and Customers <ul style="list-style-type: none"> For a single date within the range specified, complete a scheduled submission of the FDID Population with CAT-reportable activity between June 12, 2022 and September 30, 2022 to the Production Environment in Full CAIS format. FINRA CAT will begin contacting all Industry Members on October 3 to schedule their specific reporting date. 	October 10 – October 31, 2022
Interim Reporting Obligation 3: Daily reporting of FDID and Customer Data <ul style="list-style-type: none"> All Industry Members must begin daily reporting of FDID Records and changes/additions for all CAT-reportable activity beginning June 12, 2022 through at least September 30, 2022. Corrections to reported data are not required until Interim Reporting Obligation 4. 	November 7, 2022
Interim Reporting Obligation 4: All outstanding Rejections and Material Inconsistencies addressed <ul style="list-style-type: none"> All outstanding rejections and Material Inconsistencies for all CAT-reportable activity beginning June 12, 2022 are resolved. 	December 5, 2022
Full CAIS Compliance date (Error correction timeline fully enforced) <ul style="list-style-type: none"> All error repair and Material Inconsistency resolution deadlines are enforced. 	December 12, 2022

Compliance dates are listed in the [Timeline](#). See also [CAT Alert 2022-01](#).

CAIS Resources

CAIS Resources

- ▶ [Full CAIS Technical Specifications for Industry Members](#)
- ▶ [Customer and Account Schemas \(Full CAIS\)](#)
- ▶ [Full CAIS Industry Member Reporting Scenarios](#)
- ▶ [Full CAIS Known Issues List and Planned Full CAIS Technical Specifications Updates](#)
- ▶ [CAT Alerts](#)
- ▶ [CAIS Registration & Onboarding](#) page of the CAT website
 - [Industry Member CAIS Onboarding Guide](#)
 - [CAT CAIS Reporter Portal User Guide](#)
 - [Small Firm Roadmap to Full CAIS Compliance](#)
- ▶ [Section Q of the FAQs](#)
- ▶ [CAIS industry webinars](#) (Past Events and Future Events)
- ▶ [Video Tutorials](#)

FINRA CAT Helpdesk

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

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.