

Consolidated Audit Trail

TRF Linkage Industry Webinar 9/29/20

Agenda

- ▶ TRF Matching Timeline
- ▶ Linkage Keys and Errors
- ▶ TRF Matching Processing
- ▶ Early Observations on TRF Linkage Errors
- ▶ Feedback and Corrections

2a/2b Timelines

- ▶ The CAT Industry Member Test and Production Environments for Phases 2a and 2b are being rolled out in a series of releases which implement different validation types at different times. These releases include:

Release	Test Environment Deployment Date	Production Environment Deployment Date	Compliance Go-Live Date
1- File Submission and Data Integrity	December 16, 2019 (multiple releases)	April 13, 2020 (multiple releases)	June 22, 2020 (Phase 2a)
			July 20, 2020 (Phase 2b)
2- Intrafirm Linkage	April 20, 2020 (multiple releases)	May 4, 2020 (multiple releases)	July 27, 2020 (Phase 2a)
			August 24, 2020 (Phase 2b)
3- Interfirm Linkage	July 27, 2020	August 10, 2020	October 26, 2020 (Phase 2a)
			January 4, 2021 (Phase 2b)
4- Exchange/ TRF Linkage	September 9, 2020	September 28, 2020	October 26, 2020 (Phase 2a)
			January 4, 2021 (Phase 2b)

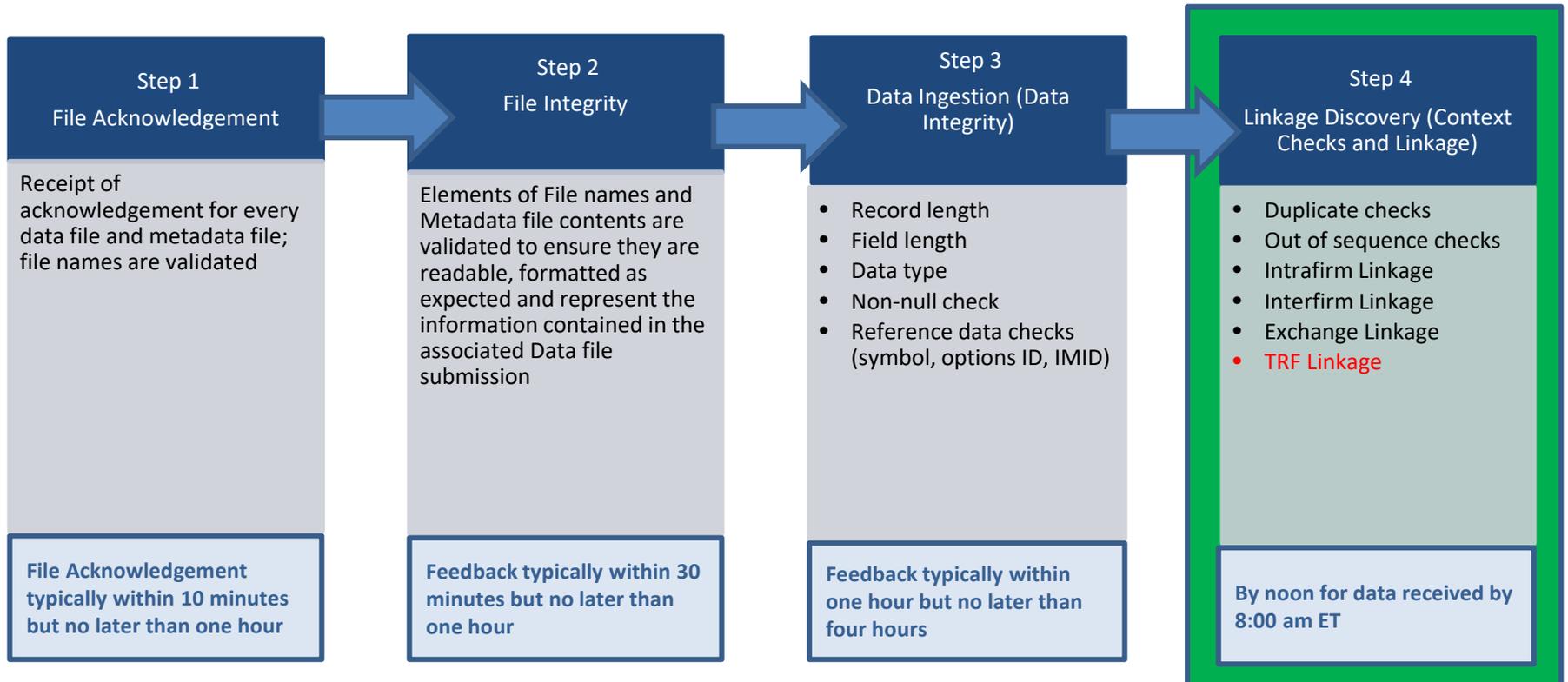
- ▶ Refer to CAT Alert 2020-01 for additional information.

Industry Member 2a/2b – Release 3 & 4 (Interfirm, Exchange & TRF) Release Rollout

Interfirm Release 3.1 Industry Test – 7/27/2020 Production – 8/10/2020	Interfirm Release 3.2 Industry Test – 8/10/2020 Production – 8/10/2020	Exchange/TRF Release 4.1 Industry Test – 9/9/2020 Production – 9/28/2020	Interfirm Release 3.3 Exchange/TRF Release 4.2 Industry Test – 9/21/2020 Production – 9/28/2020
<ul style="list-style-type: none"> Machine-to-Machine Interfirm Validations & Feedback including Named Errors. <p>CAT Reporter Portal</p> <ul style="list-style-type: none"> Download Interfirm Feedback including Named Errors. Set preference for Named Feedback (JSON vs CSV). 	<p>CAT Reporter Portal</p> <ul style="list-style-type: none"> Reporting Summary (Interfirm Link Eligible, Errors, Warnings and Adjusted Error Rate). Counterparty statistics downloadable for Interfirm Unlinked and Unlinked Named Errors. Error Code Count screen to include Interfirm Errors and Warning including Named Errors. Error Search screen ability to view and correct Interfirm Linkage Errors (No Named Errors). 	<ul style="list-style-type: none"> Machine-to-Machine Exchange/TRF Validations & Feedback including Named Errors. <p>CAT Reporter Portal</p> <ul style="list-style-type: none"> Download Exchange/TRF Feedback including Named Errors. 	<p>CAT Reporter Portal</p> <ul style="list-style-type: none"> Reporting Summary (Exchange/TRF Link Eligible, Errors and Adjusted Error Rate). Error Code Count screen to include Exchange/TRF Errors including Named Errors. New Screen including Export for Interfirm, Exchange & TRF statistics by counterparty. Error Search screen <ul style="list-style-type: none"> View and correct Exchange & TRF Linkage Errors. View Interfirm Named Errors (not repairable via the Portal).

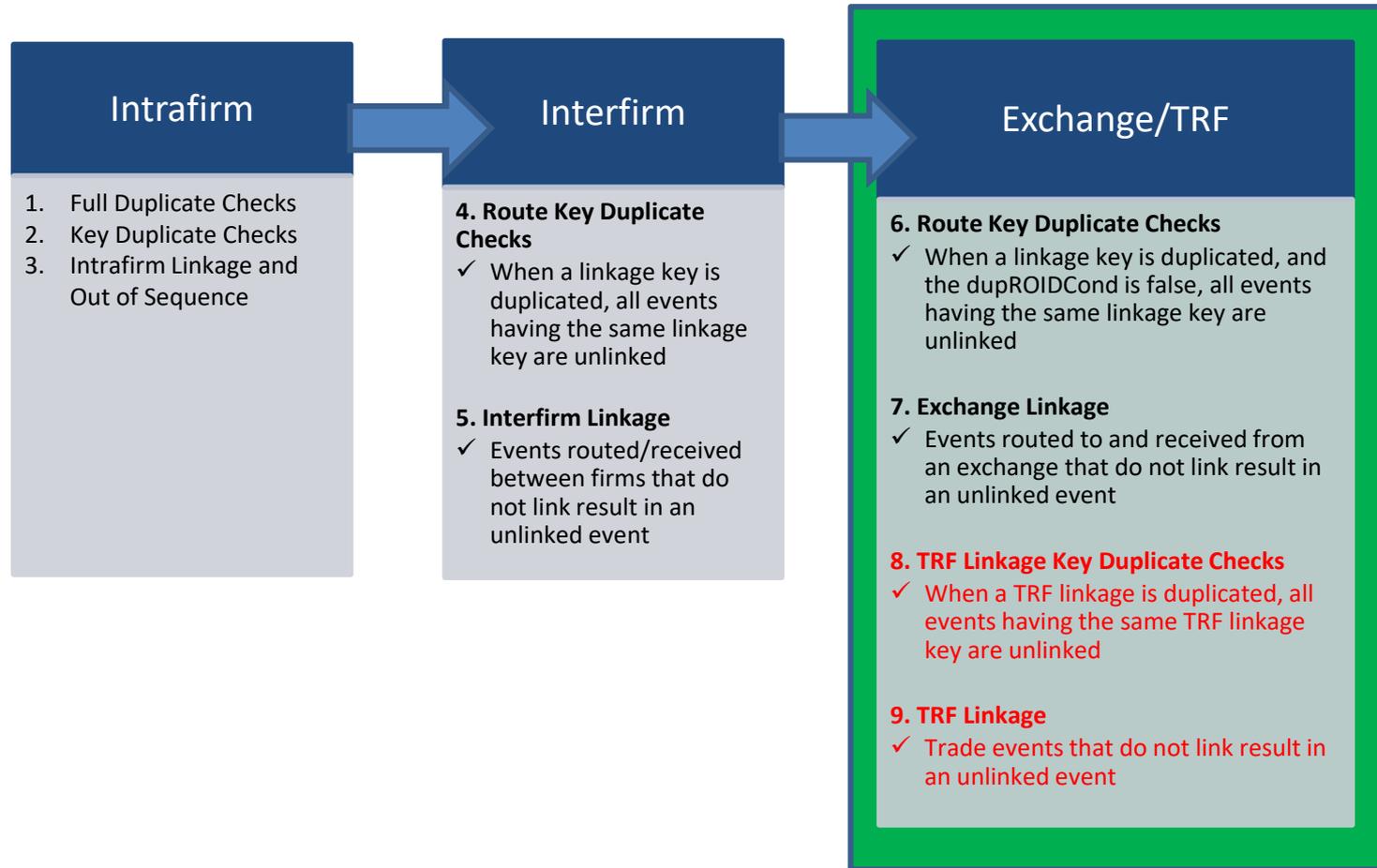
Phase 2a Interfirm/Exchange/TRF Compliance Date – 10/26/2020
Phase 2b Interfirm/Exchange Compliance Date – 1/4/2021

CAT Processing



Linkage Keys and Errors

Linkage Discovery Steps



TRF Linkage Key

- ▶ Trade is executed and reported to both CAT and the TRF/ADF/ORF:

Industry Member	TRF/ADF/ORF
Event Date	Event Date portion of Execution Timestamp
CATReporterIMID	Reporting or Contra MPIDs
symbol	symbol
tapeTradeID	Reporting or Contra Branch Sequence Number or Compliance ID
marketCenterID	Market Center ID

- ▶ Industry Members may link to either the Reporting Side or the Contra Side of the related Trade Report.
 - Reporting Side MPID must match the Reporting Side details and Contra Side MPID must match the Contra Side details. It is not permissible for the Reporting Side MPID to match the Contra Side details or vice versa.
- ▶ The combination of the data elements that make up the TRF Linkage Key must be unique. When the TRF Linkage Key is not unique, all events with the same TRF Linkage Key will be rejected.
- ▶ Refer to **Section 2.6.3** of the IM Tech Spec for additional information.

Reporting Exception Codes

- ▶ Indicates the reason that a unique identifier (e.g., Branch Sequence Number, Compliance ID) was not supplied to a transaction reporting system.

REC Value	Description
C	Industry Member was the contra side of the trade report for a negotiated trade which was reported to a TRF via a QSR or AGU (use of this REC has additional requirements in Phase 2c).
F	Reported on Form T pursuant to FINRA Trade Reporting Rules.
P	Intra-firm order where there is no change in beneficial ownership.
N	Trade was executed by a non-FINRA member and reported to the TRF by the FINRA member counterparty.

- ▶ Linkage will not be attempted with the *reportingExceptionCode* field is populated.
- ▶ If the *tapeTradeID* field is populated, the *reportingExceptionCode* field must be blank. If the *reportingExceptionCode* field is populated, the *tapeTradeID* field must be blank.
- ▶ The *marketCenterID* field may be populated when the *reportingExceptionCode* is populated if it is known.

TRF Linkage– OATS vs CAT

▶ OATS

- OATS Execution Reports (EX) or Combined Order/Execution Reports (OE) are one-sided and represent either the buy side or the sell side.
 - In an agency cross scenario, an EX or OE is required for both the buy side and the sell side, with each EX or OE separately linking to the trade report that the executing firm reported for public dissemination purposes.

▶ CAT

- CAT Trade events (MEOT) are two-sided, containing information on both sides of the trade (buy side and sell side) and require a single Tape Trade ID.
 - In an agency cross scenario, a single MEOT must match to the trade report that the executing Industry Member reported for public dissemination purposes using a single Tape Trade ID .

Rejected/Corrected TRF Reports

- ▶ **Scenario:** A trade was rejected in the TRF/ADF/ORF, and the rejected record was corrected, re-submitted, and accepted.
- ▶ Does the firm have an obligation to populate the *cancelFlag* as 'True' in its CAT Trade event?
 - If the CAT Trade event is linked to the corrected TRF report, the *cancelFlag* must be set to '**False**'.
 - If the CAT Trade event was NOT linked to the corrected TRF report, the *cancelFlag* must be set to '**True**'.
- ▶ Does the firm have an obligation to correct its CAT Trade event?
 - If the CAT Trade event is linked to the corrected TRF report, the firm does **not** have an obligation to correct its CAT Trade event.
 - If the CAT Trade event was NOT linked to the corrected TRF report, the firm does have an obligation to correct its CAT Trade event.
- ▶ Refer to CAT FAQs E25, E29 and E30 for additional information.

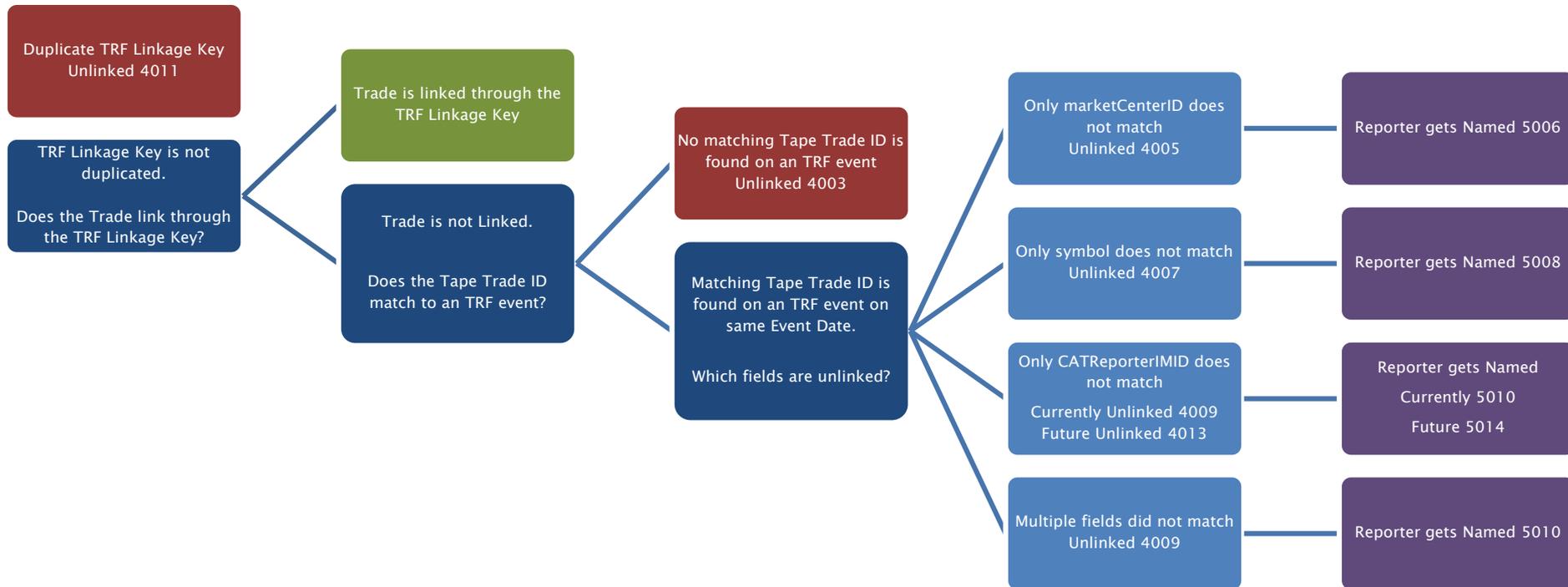
Trade Linkage Error Codes

Error Type	Assigned Series
Trade Linkage Error Codes	4000 and 5000

Error Type	Description
Unlinked Trade event	Error codes assigned to the CAT Reporter who submitted the Trade event that is unlinked. Specific codes delivered to distinguish which part of the linkage key failed to match.
Named Errors	Error codes assigned when the CAT Reporter was named in a TRF/ADF/ORF Trade Report that is unlinked.
TRF Linkage Key Duplicates	Error codes assigned when an Industry Member reports a duplicated TRF Linkage Key. Duplication of TRF Linkage Keys will result in unlinked errors for all records having the same key.

TRF- Linkage Order of Operations

Is the Trade Linkage Key Duplicated?



Early Observations with Differences in TRF Linkage Key

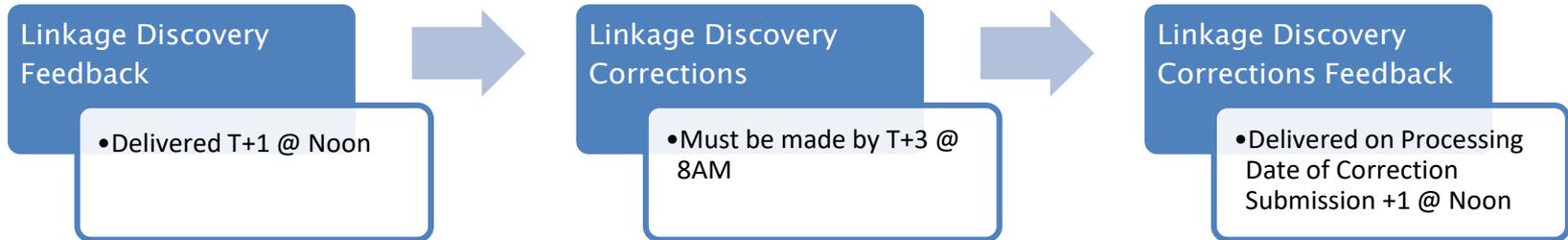
The following scenarios are generating unlinked events and have been observed across firms. The Industry Member is:

1. Populating a different CATReporterIMID on the MEOT than in the TRF/ADF/ORF report.
2. Populating an incorrect Reporting or Contra Branch Sequence Number or Compliance ID.
 - Have seen instances where in cross scenarios, firms are putting a “B” or “S” in front of the Branch/Seq, etc. in the TRF report (to facilitate OATS) but are reporting the Tape Trade ID on the MEOT without the “B” or “S” prefix.
3. Populating an incorrect Market Center ID.
 - Have seen instances where firms populate the exchange code instead of the TRF code.
4. Reporting a duplicated TRF Linkage Key.

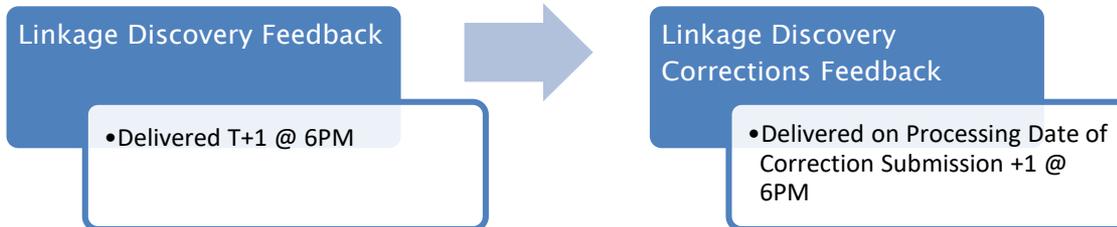
Linkage Feedback and Corrections

Linkage Discovery Feedback and Corrections

Production Environment



Industry Test Environment



Linkage Feedback Delivered via SFTP

- ▶ Feedback files will be accessible in the Submitter's feedback directories.
- ▶ Feedback for data submitted by a CAT Reporting Agent on behalf of a CAT Reporter will be accessible under the CAT Reporter's feedback directories if the CAT Reporter has an SFTP account.
- ▶ Named Errors will be accessible **only** in the CAT Reporter's feedback directory.
 - The feedback format will match the format of the original submission unless the CAT Reporter specifies a preference for Named Unlinked Errors that is different than the Unlinked Errors.
- ▶ SFTP feedback will remain available for 10 calendar days.

Linkage Feedback Available on the Reporter Portal

- ▶ Machine formatted feedback files for all submission types will be accessible for download by the CAT Reporter, Submitter and Third-Party Reporting agent (if applicable).
- ▶ Machine formatted feedback files for Named errors will be accessible for download **only** by the CAT Reporter.
- ▶ Machine formatted feedback files will remain available for 10 days.

Correcting TRF Unlinked Errors

- ▶ Feedback and Correction approach is the same as what is occurring with IM to IM

Example – The IM populated an incorrect marketCenterID and subsequently corrected it.

	Error Code	actionType	Type	CATReporterIMID	symbol	tapeTradeID	marketCenterID
Unlinked and Unlinked Named	4005, 5006	NEW	MEOT	ZZZT1	XYZ	99999999ZZZT	Q
TRF Report			TRF	ZZZT1	XYZ	99999999ZZZT	L
Resolves both errors		RPR	MEOT	ZZZT1	XYZ	99999999ZZZT	L

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.