

CAT Reporting Customer & Account Technical Specifications for Industry Members

4/8/2022

Version 2.0 r8

Table of Contents

Preface	iv
Executive Summary	v
1. Introduction.....	1
1.1. CAT Overview.....	1
2. CAT Customer & Account Reporting Fundamentals.....	3
2.1. Key Data Elements.....	3
2.1.1. Firm Identifiers in File Submissions.....	3
2.2. Reference Data.....	4
2.2.1. Firm Designated ID (FDID).....	4
2.2.2. Large Trader ID (LTID) and Unidentified Large Trader ID (ULTID).....	5
2.2.3. FDID Open Date	6
2.2.4. Customer	6
2.2.5. Input Identifiers.....	7
2.2.6. Transformed Identifier (TID)	8
2.2.7. Customer ID	9
2.2.8. CCID Subsystem.....	9
2.2.9. CAIS Data Subsystem	9
2.2.10. Reportable Identifier	11
2.2.11. Data Inconsistency.....	11
2.2.12. Material Inconsistencies Procedure.....	12
2.2.13. Material Inconsistency Obligations for Triggering Firm	13
2.2.14. Material Inconsistency Obligations for Impacted Firm	14
2.2.15. Notification of Customer Record Updates.....	15
2.3. Data Types.....	16
2.3.1. Data Validation Based on Data Types	17
2.3.2. Required, Conditional, and Optional Fields.....	19
3. Special Reporting Requirements.....	21
3.1. Replacement of FDIDs.....	21
3.2. Replacement of Transformed Identifier (TID).....	21
3.3. Mass Transfer of FDIDs across CAT Reporter Firms.....	23
3.3.1. Automated Transfer Procedure.....	23
3.3.2. Transfers enacted in CAIS Data Reporting	24
3.4. Translation of Input Identifiers to TID Values	24
3.5. Translation of TID to CCID Values	25
3.6. Transition from LTID to Full Customer Reporting.....	25
3.7. Full Data Replacement Submission.....	26

3.8.	Periodic Customer & Account Information Refresh	26
3.9.	Reporting Multiple Versions of a CAT Customer	27
3.10.	Tracking of Historical CAT Customer Names	27
3.11.	Special Rules Regarding FDID Characters	27
3.12.	Special Rules Regarding Natural Person Customer Names	28
3.13.	Special Rules Regarding Natural Person Authorized Traders	29
4.	CAIS Reporting	31
4.1.	CAIS Data File	31
4.2.	Transformed Identifiers File	49
5.	Submission Process	55
5.1.	File Submissions and Data Formats	55
5.1.1.	File Submission Names	55
5.1.2.	Submission Formats	57
5.1.3.	Reference Data File Submission	57
5.1.4.	Identifiers Data File Submission	64
5.1.5.	Paired CAIS Data and Transformed Identifiers File JSON Example	65
5.1.6.	Schema	69
5.2.	Connectivity	70
5.3.	CAT Interface Methods	71
5.3.1.	CAT File Transfer	72
5.3.2.	CAT Reporter Portal - CAIS	74
5.4.	CAT CAIS Reporting Hours	74
5.4.1.	Submission of CAT Account and Customer Data	74
5.4.2.	Deadline of Repair for Errors Identified by CAT CAIS	75
5.4.3.	Deadline of Repair of Data Inconsistencies or Confirmation of Data Accuracy Identified by CAT CAIS	75
5.5.	Security	76
5.5.1.	Encryption (In-transit)	76
5.5.2.	Encryption (At-rest)	76
5.5.3.	Authentication	76
6.	Feedback and Corrections	77
6.1.	File and Error Feedback	77
6.1.1.	Feedback Generation	78
6.1.2.	Feedback File Names and Format	79
6.1.3.	JSON Examples of Feedback File for file acknowledgement	87
6.2.	File Integrity	87
6.2.1.	JSON Examples for File Integrity Feedback	88

6.3. Data Ingestion	89
6.3.1. JSON Examples for Data Ingestion Feedback.....	90
6.4. Submission Inconsistencies	92
6.4.1. JSON Examples for Submission Inconsistencies Feedback.....	93
6.5. Corrections	94
6.5.1. File Integrity Errors.....	94
6.5.2. Data Validation Errors	94
6.6. FDID Version Report.....	95
6.6.1. JSON Examples for FDID Version Report	96
7. Nightly Data Inconsistencies Feedback.....	98
7.1.1. Data Inconsistencies Feedback File Names	99
7.1.2. JSON Examples for Data Inconsistencies Feedback.....	100
8. Testing.....	102
9. Additional Information	103
9.1. Public Website	103
Appendices	104
Appendix A: Change Release Management Process	105
Appendix B: Error Codes	106
B.1 File Integrity Errors.....	106
B.2 Data Validation Errors	108
B.3 Data Layer Validation Error Codes	115
B.4 Warning Error Codes.....	115
B.4 Inconsistency Codes	118
Appendix C: Glossary.....	119
Appendix D: Data Dictionary.....	121
Appendix E: Country and Region Codes.....	143

Preface

Rule 613 of the Securities Exchange Act of 1934 requires national securities exchanges and national securities associations (“SROs”) to submit a national market system plan to the Securities and Exchange Commission (“Commission” or “SEC”) to create, implement, and maintain a consolidated audit trail (the “CAT”) that would allow regulators to more efficiently and accurately track all activity in U.S. equity and listed options markets. Pursuant to Rule 613, the SROs filed with the Commission the National Market System Plan Governing the Consolidated Audit Trail (“CAT NMS Plan”), which was approved by the Commission on November 15, 2016.

Under Rule 613(g)(2), each member of a national securities exchange or national securities association is required to comply with all the provisions of the CAT NMS Plan. Relatedly, as mandated under Rule 613, the CAT NMS Plan requires each SRO to adopt rules requiring its members to comply with Rule 613 and the CAT NMS Plan, and to agree to enforce compliance by its members in that regard. Accordingly, each SRO has adopted rules requiring its members to comply with Rule 613 and the CAT NMS Plan. See, e.g., FINRA Rule 6800 Series.

The SROs jointly own Consolidated Audit Trail, LLC, which was formed by the SROs to arrange for and oversee the creation, implementation, and maintenance of the CAT as required under Rule 613. Thus, the CAT is a facility of each SRO.

This Customer and Account Technical Specification represents the second of the two phase approach to Industry Member reporting of Customer and Account data, including the full Customer and Account information required under the CAT NMS Plan.

Table 1: Industry Customer & Account Specifications Phased Approach

LTID Phase Production – 12/2020 Compliance Dates: 4/26/2021 Equity Large Industry Members 12/13/2021 2d Options and Small Industry Members	Full Customer and Account Reporting Compliance Date: July 11, 2022
FDID, FDID Account Opening Date, LTID and LTID Effective Date	Remainder of Account information and all Customer information

Executive Summary

This final document describes the requirements for the reporting of Customer and Account data to CAT by Industry Members, including detailed information about data elements and file submission. It also describes how Industry Members submit files to CAT, including access instructions, network and transport options, and testing requirements. The final version of the CAT Customer & Account Reporting Technical Specification includes information regarding full Customer data submission.

A separate companion document containing detailed reporting scenarios entitled CAT Customer & Account Industry Member Reporting Scenarios should be used as a guide for determining how the field values laid out in this document must be applied when reporting various scenarios for Customer and Account data.

Note: All 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 actually reported to CAIS.

Table 2: Revision / Change Process

Version	Date	Author	Description
DRAFT 1.0	12/13/2019	Consolidated Audit Trail, LLC	Initial draft
1.0	1/31/2020	Consolidated Audit Trail, LLC	Publication of initial version
1.1	4/17/2020	Consolidated Audit Trail, LLC	Addition of Boolean data type Addition of <i>fdidEndDateNULL</i> , <i>fdidEndReasonNULL</i> , <i>replacedByFDIDNULL</i> , <i>ItidEndDateNULL</i> , and <i>ItidEndReasonNULL</i> attributes Removal of ‘NULL’ acceptable values from <i>fdidEndDate</i> , <i>fdidEndReason</i> , <i>replacedByFDIDNULL</i> , <i>ItidEndDate</i> , and <i>ItidEndReason</i> attributes Addition of <i>failedCorrectionItems</i> array in Feedback file Modified guidance on nullifying previously populated attributes Modified submission and feedback examples to include additions/removals of attributes Modified schema field descriptions Replacement of CAT CAIS Reporter Portal with CAT Reporter Portal – CAIS Addition and modification of Error Codes Separation of Data Validation Warnings from Data Validation

Version	Date	Author	Description
			<p>Errors</p> <p>Addition of Data Layer Validation Error Codes</p> <p>Addition of optional Group attribute for submission file names</p> <p>Replaced usage of Status with Feedback for feedback file</p>
1.1.1	6/4/2020	Consolidated Audit Trail, LLC	<p>Inclusion of 'Entity ID' as example in FDID Definition</p> <p>Inclusion of 'ENTITY' as a valid FDID Type</p> <p>Correction of CAT CAIS Validation Warnings table Error Code numbering</p> <p>Clarification of 'Trading Day' as 'CAT Trading Day' and definition of 'CAT Trading Day'</p> <p>Explicit listing of 'false' as an acceptable value for Boolean attributes</p> <p>Inclusion of Error Code 22006 for duplicated <i>largeTraderID</i> within a single FDID Record submission</p>
1.1.2	12/02/2020	Consolidated Audit Trail, LLC	<p>Update to the Unsigned data type to be the same range as a 63-bit unsigned integer rather than a 64-bit unsigned integer</p> <p>Updated <i>firmDesignatedID</i> data type from Alphanumeric to Text to bring in line with Transaction reporting. Also results in changes to data type for <i>replacedByFDID</i> and <i>correctingFirmDesignatedID</i></p> <p>Modification of the Feedback File to include <i>submitterUserName</i> and remove <i>integrityErrorCode</i></p> <p>Renamed <i>rejectionID</i> within the <i>failedCorrectionItems</i> array to <i>failedRejectionID</i>, to clarify purpose</p>
DRAFT 2.0	6/30/2020	Consolidated Audit Trail, LLC	<p>Addition of Customer data, definitions, and reporting requirements</p> <p>Addition of separate Transformed Identifiers file</p> <p>Modified Feedback file to include Customer Data and Inconsistencies</p> <p>Expanded guidance for Reference Data File Submission</p> <p>Addition and modification of Error Codes</p> <p>Addition and modification of Data Layer Validation Error Codes</p> <p>Addition of Data Inconsistency Codes</p>
DRAFT 2.0 r1	12/01/2020	Consolidated Audit Trail, LLC	<p>Modifications to Schema</p> <p>Modification of Tax Identifier to Input Identifier terminology</p> <p>Addition of 'FOREIGN' Input Identifier type</p> <p>Modification of Update Confirmation to Update Notification</p> <p>Modifications to File Submission rules</p> <p>Inclusion of Mass Transfer of FDIDs across CAT Reporter Firms</p> <p>Inclusion of Full Data Replace Submission</p> <p>Addition of Country and Region Code reference lists</p>
DRAFT 2.0 r2	1/19/2021	Consolidated Audit Trail, LLC	<p>Updates to the Account Type and Customer Type attribute codes and definitions</p> <p>Changed approach from Delta Files with Delta Records, to Delta Files with Full Records</p> <p>Split <i>role</i> value of 'HOLDER' to two versions – 'TRDHOLDER' and 'NTHOLDER', to reflect holders with trading and holders without trading authorization</p> <p>Removed 'NULL' paired fields as a result of the change to Delta</p>

Version	Date	Author	Description
			<p>Files with Full Records</p> <p>Updated examples based on schema changes</p> <p>Updated to detail actions to take if a Foreign TID Type/Foreign TID Country Code/TID Value is incorrectly reported as a Natural Person or Legal Entity, and needs to be reported as the other</p> <p>Added <i>customerRejectionEventID</i> to feedback file to provide a single consistent ID for Customer rejections</p> <p>Revised guidance for clearing LTID rejections</p> <p>Removed <i>correctingLargeTraderID</i> attribute from the Correction Actions list</p>
2.0	1/29/2021	Consolidated Audit Trail, LLC	<p>Modification to ULTID format validation</p> <p>Modifications to <i>accountType</i></p> <p>Removed <i>accountSubType</i></p> <p>Split <i>role</i> value of 'AUTHTRADER' to two versions – 'AUTHREP' and 'AUTH3RD' - to denote Authorized Traders who are, or are not, employees of the reporting firm</p> <p>Addition of <i>hasDiscretion</i> within <i>fdidCustomerList</i></p> <p>Modifications of Appendices B and D</p> <p>Denoted certain conditionally approved sections in italics, and included note regarding conditional approval</p>
2.0 r1	3/9/2021	Consolidated Audit Trail, LLC	<p>Removed note regarding conditional approval, and converted all previously italicized conditionally approved sections to plain text, following approval</p> <p>Corrected <i>priorCATReporterFDID</i> data type to Text, following change of FDID from Alphanumeric to Text</p> <p>Corrected JSON Object level for the <i>addressList</i> on the Natural Person and Legal Entity Customer Record entries</p> <p>Minor textual edits</p>
2.0 r2	5/7/2021	Consolidated Audit Trail, LLC	<p>Added <i>correspondentCRD</i> attribute to the Main JSON Object level, to enable firms to delineate Customer and Account data of their correspondent introducing brokers</p> <p>Changed reporting requirements to allow firms to report multiple versions of a single Customer within a single submission file, and added a Special Reporting Requirements section regarding Reporting Multiple Versions of a CAT Customer</p> <p>Removed Material and Minor Inconsistency checks against First Name and Last Name of a Natural Person CAT Customer</p> <p>Changed data type of <i>primeBrokerID</i>, <i>bankDepositoryID</i>, and <i>clearingBrokerID</i> to be Arrays rather than Alphanumeric, to allow firms to report more than one value for a single FDID Record</p> <p>Modifications to remove LTID date validation comparisons against FDID dates – retirement of Error Codes 22025, 22026, 22027, 23002, and 23003 (included originally in LTID Technical Specification revision)</p> <p>Moved <i>customerType</i> attribute from the FDID Record to the Customer Record</p> <p>Removed <i>customerType</i> value of 'OTHER' and replaced with 'NOTAPPLICABLE'</p> <p>Added detailed information regarding FDID character rules that have been added following the transition from alphanumeric to text</p>

Version	Date	Author	Description
			<p>Clarified file creation and versioning approach for Feedback files.</p> <p>Modified Feedback file schemas</p> <p>Updated data and feedback examples</p> <p>Modifications to Appendix B Error Codes</p>
2.0 r3	6/2/2021	Consolidated Audit Trail, LLC	<p>Added detail for Section 3.7 – Periodic Customer & Account Information Refresh for requirements on refreshing CAIS submission data</p> <p>Updated Section 5.3 – CAT Interface Methods – to include the Refresh feedback</p>
2.0 r4	8/24/2021	Consolidated Audit Trail, LLC	<p>Added <i>receiptTimestamp</i> and <i>completedTimestamp</i> attributes to TIDs Feedback File schema</p> <p>Removed <i>customerStartDate</i>, <i>customerEndDate</i>, and <i>customerEndReason</i> attributes</p> <p>Updated <i>branchOfficeCRD</i> attribute to be Conditional</p> <p>Increased maximum character length for the <i>accountName</i> and <i>legalName</i> attributes. Clarified Input Identifier reporting requirements in Section 2.2.5 – Input Identifiers</p> <p>Clarified <i>accountType</i> and <i>fdidType</i> reporting requirements in Section 5.1.3 – Reference Data File Submission</p> <p>Updated definitions of <i>primeBrokerID</i> and <i>bankDepositoryID</i> to remove mention of custodian types</p> <p>Added <i>catSubmitterID</i> attribute to Nightly Inconsistencies Feedback File name structure</p> <p>Updated definitions of 'ACCREDITED', 'EMPLOYEE', 'OTHBKR' and 'ADVISER' <i>customerType</i> values</p> <p>Added terminal submission states INCOMPLETE_PROCESSING_FAILURE and COMPLETED_FILE_TIMEOUT</p> <p>Updated guidance and validations for appropriate <i>foreignTIDType</i> values for Natural Person or Legal Entity CAT Customers</p> <p>Added <i>doingBusinessAs</i> attribute</p> <p>Updated data and feedback examples</p> <p>Modified Appendix B Error Codes</p> <p>Modified Appendix E Region and Postal Code values to only be applicable for US and CA country values</p>
2.0 r5	10/8/2021	Consolidated Audit Trail, LLC	<p>Addition of Extended Text data type</p> <p>Updated <i>doingBusinessAs</i> attribute to be Conditional</p> <p>Updated <i>fdidCustomerList</i> attribute to be Conditional</p> <p>Updated <i>registeredRepCRD</i> attribute to be Optional</p> <p>Corrected format of <i>regionCode</i> for US and Canada Addresses to AA-XX</p> <p>Updated definition of 'AVERAGE' <i>accountType</i> value</p> <p>Updated definition of <i>doingBusinessAs</i> attribute</p> <p>Updated definition of <i>branchOfficeCRD</i> attribute</p> <p>Clarified FDID definition in Section 2.2.1 – Firm Designated ID</p> <p>Added reporting guidance for Correspondent firms' Accounts in Section 2.1.1 – Firm Identifiers in File Submissions</p> <p>Clarified reporting guidance for 'FOREIGN' Input Identifiers in Section 2.2.5 – Material Inconsistencies Procedures</p>

Version	Date	Author	Description
			<p>Addition of Sections 2.2.13 – Material Inconsistency Obligations for Triggering Firms and 2.2.14 – Material Inconsistency Obligations for Impacted Firms</p> <p>Clarified reporting guidance for replacement and transfers of FDIDs in Section 3 – Special Reporting Requirements</p> <p>Modified reporting guidance for ‘RELATIONSHIP’ and ‘ENTITYID’ FDIDs in Section 5.1.3 – Reference Data File Submission</p> <p>Modified reporting guidance for ‘EMPLOYEE’, ‘BD’, and ‘RIC’ <i>customerType</i> values in Section 5.1.3 – Reference Data File Submission</p> <p>Added reporting guidance for <i>branchOfficeCRD</i> and <i>registeredRepCRD</i> for clearing firms and institutional customers in Section 5.1.3 – Reference Data File Submission</p> <p>Added reporting guidance for CAT Customers with trading discretion to Section 5.1.3 – Reference Data File Submission</p> <p>Addition of Account, Legal Entity, and Natural Person definitions in Appendix C</p> <p>Modified JSON example schemas</p> <p>Modified Appendix B error codes</p> <p>Corrected <i>customerType</i> value of ‘ADVISER’ for Legal Entity Customer Record</p>
2.0 r6	12/17/2021	Consolidated Audit Trail, LLC	<p>Modified Executive Summary</p> <p>Added ‘DRIVERLICENSE’ <i>foreignTIDType</i> value</p> <p>Added ‘AE’, ‘AA’, and ‘AP’ as valid United States <i>regionCode</i> values for Military and Diplomatic addresses in Appendix E</p> <p>Added specific Go Live dates to Table 1</p> <p>Added guidance on ‘FOR’ <i>primeBrokerID</i> or <i>bankDepositoryID</i> value in Section 5.1.3.1 – Reference Data File Submission – FDID and attribute definitions</p> <p>Added guidance for reporting of ‘BROKERAGE’ <i>accountType</i> value in Section 5.1.3 – Reference Data File Submission</p> <p>Updated <i>registeredRepCRD</i> attribute definition</p> <p>Updated 2.2.13 and 2.2.14 regarding Material Inconsistency Obligations</p> <p>Updated ‘EMPLOYEE’ and ‘ADVISER’ <i>customerType</i> value definitions</p> <p>Updated ‘BROKERAGE’ <i>accountType</i> value definition</p> <p>Clarified Input Identifier guidance and formats, and updated validations for EINs used as Input Identifiers in Section 2.2.5 - Input Identifiers</p> <p>Updated guidance for EINs in Section 3.3 Translation of Input Identifiers to TID Values</p> <p>Added hash examples to Section 5.1 - File Submissions and Data Formats</p> <p>Added guidance for an Industry Member that stores single name value for a Customer Record in Section 5.1.3 – Reference Data File Submission</p> <p>Added reporting guidance for Military and Diplomatic addresses in Section 5.1.3 – Reference Data File Submission</p> <p>Clarified reporting of <i>registeredRepCRD</i> attribute in Section 5.1.3.1 - Reference Data File Submission – FDID</p>

Version	Date	Author	Description
			<p>Clarified submission inconsistency feedback files in Section 6.4 - Submission Inconsistencies</p> <p>Clarified current Minor Inconsistencies in Section 2.2.11 – Data Inconsistency</p> <p>Clarified current Material Inconsistencies in Table 3</p> <p>Clarified 'ENDED' <i>roleEndReason</i> value definition</p> <p>Corrected <i>firmDesignatedID</i> and <i>accountName</i> attribute definitions</p> <p>Corrected Firm Designated ID definition in Appendix C – Glossary</p> <p>Corrected Extended Text field data types in Data Dictionary to match CAIS Data File section</p> <p>Modified JSON example schemas</p> <p>Removed error codes 21015 (Paired Identifiers File has Integrity Error) and 21515 (Paired Data File has Integrity Error)</p> <p>Added error codes 21020 (Automated transfer in progress), 22539 (CAT Customer Record has an unresolved inconsistency), and 22540 (Invalid middleName)</p> <p>Modified error codes 22535 (Legal Entity CAT Customer reported with improper foreignTIDType) and 24005 (Improper correction attempt)</p> <p>Replaced instances of "firm" with "Industry Member" throughout document</p>
2.0 r7	3/9/2022	Consolidated Audit Trail, LLC	<p>Added <i>DVPCustodianID</i> attribute</p> <p>Removed <i>primeBrokerID</i> and <i>bankDepositoryID</i> attributes</p> <p>Added Section 6.6 – FDID Version Report</p> <p>Added 'INACTIVE' as an acceptable value for <i>fdidEndReason</i>, <i>ltidEndReason</i>, and <i>roleEndReason</i> attributes</p> <p>Removed 'CP' and 'OTHBKR' as acceptable values for <i>customerType</i> for Legal Entity CAT Customers</p> <p>Removed 'BROKERAGE' and 'ADVISED' as acceptable values for the <i>accountType</i> attribute</p> <p>Updated definition of 'OTHER' <i>accountType</i> value</p> <p>Updated definition of 'ADVISER' <i>customerType</i> value for Legal Entity CAT Customers</p> <p>Added Table 3 to illustrate inconsistency timeline</p> <p>Clarified LTID attribute in Full CAIS in Section 2.2.2 – Large Trader ID and Unidentified Large Trader ID</p> <p>Added reference to FAQ Q57 in Section 2.2.6 – Transformed Identifier (TID)</p> <p>Clarified acceptable use of 'NNVE' value in Section 5.1.3.2 – Reference Data File Submission – Customer</p> <p>Clarified inconsistency grace period in Sections 2.2.13 – Material Inconsistency Obligations for Triggering Firms and 2.2.14 – Material Inconsistency Obligations for Impacted Firms</p> <p>Clarified definition of <i>clearingBrokerID</i>, <i>statusHistory</i>, and <i>submissionStatus</i> attributes</p> <p>Replaced <i>rejectionID</i> attribute with <i>warningID</i> attribute for TIDs Feedback Files</p> <p>Updated data type of <i>submissionID</i> in TIDs Feedback File</p> <p>Corrected references of <i>tidRecordID</i> to <i>customerRecordID</i></p>

Version	Date	Author	Description
			<p>Corrected references of <i>correctionsList</i> to <i>correctionList</i></p> <p>Removal of error codes 22051 (Neither <i>primeBrokerID</i> nor <i>bankDepositoryID</i> populated), 22062 (Invalid <i>primeBrokerID</i>), and 22063 (Invalid <i>bankDepositoryID</i>)</p> <p>Clarified definitions of error codes 22529 (Customer Record rejected because another version of the customer was rejected), 22533 (Multiple instances of Customer with differing data) and 22526 (<i>customerRecordID</i> not present in paired Identifiers file); and clarified definition and description of error code 22042 (Multiple active roles for within <i>fdidCustomerList</i>).</p> <p>Addition of error code 22075 (Missing or Invalid DVPCustodianID)</p>
2.0 r8	4/8/2022	Consolidated Audit Trail	<p>Added <i>foreignTIDType</i> value of 'OTHGOVT'</p> <p>Clarified Sections 2.2.11 through 2.2.15 regarding Data Inconsistencies</p> <p>Moved the Customer Data Inconsistencies table to Section 2.2.1 and the Triggered Inconsistencies and Impacted Inconsistencies tables to Section 2.2.15</p> <p>Updated Customer Data Inconsistencies table to include additional information on when a Material Inconsistency for the <i>tidType</i> attribute would be triggered</p> <p>Updated Section 2.2.1 – Firm Designated ID (FDID) example for Entity ID</p> <p>Updated Section 2.2.5 – Input Identifiers to include 'OTHGOVT' on the hierarchy of Foreign Input Identifiers, added language regarding CAT NMS Plan requirements and clarified guidance when an Input Identifier for a Customer changes</p> <p>Updated Section 2.3 –Data Types to include detail that NUMBER JSON type fields having leading zero characters are not valid JSON and will result in a file integrity error</p> <p>Added Section 3.2 – Replacement of Transformed Identifier (TID) and addition of such information where applicable</p> <p>Clarified Section 3.6 – Transition from LTID to Full Customer Reporting regarding the differences between LTID Phase and Full CAIS Phase</p> <p>Revised Section 3.7 – Full Data Replacement</p> <p>Clarified Section 3.8 – Periodic Customer & Account Information Refresh</p> <p>Added Section 3.12 – Special Rules Regarding Natural Person Customer Names and addition of such information where applicable</p> <p>Added Section 3.13 – Special Rules Regarding Natural Person Authorized Traders</p> <p>Added <i>authTraderNamesList</i> multi-dimensional array to the FDID Record in Section 4.1 – CAIS Data File</p> <p>Updated Elements of an Identifiers Feedback File Table in Section 6.1.2 – Feedback File Names and Format to include <i>submissionStatus</i> of RECORD_SCAN_COMPLETED</p> <p>Updated Sections 6.6 – FDID Version Report with report formatting, example and sentinel file information</p> <p>Added Section 6.6.1 – JSON Examples for FDID Version Report</p> <p>Updated value descriptions:</p> <ul style="list-style-type: none"> • 'ENTITYID' (<i>accountType</i>, <i>fdidType</i>)

Version	Date	Author	Description
			<ul style="list-style-type: none"> • 'CP' (<i>customerType</i>) • AUTH3RD and AUTHREP (<i>role</i>) • 'NATIONALID' (<i>foreignTIDType</i>). <p>Updated attribute descriptions:</p> <ul style="list-style-type: none"> • <i>DVPCustodianID</i> (to align with the Transaction Technical Specification description) • <i>firstName</i> • <i>clearingBrokerID</i> • <i>replacedByTID</i> • <i>replacingForeignTIDType</i> • <i>foreignTIDType</i>. <p>Reordered the allowable values for <i>foreignTIDType</i> to align with the hierarchy outlined in Section 2.2.5 – Input Identifiers</p> <p>Updated Data Type for <i>lastSubmittedRecordID</i> in Nightly Inconsistencies Feedback File to Array [Unsigned] to support submission of multiple Customer versions</p> <p>Reverted <i>warningID</i> back to <i>rejectionID</i> in Identifiers Feedback File and updated <i>rejectionID</i> to be Conditional, and made conforming changes to schema where applicable in Section 6.2.1 – JSON Examples for File Integrity Feedback and Section 6.3.1 – JSON Examples for Data Ingestion Feedback</p> <p>Clarified Rules in Sections 5.1.3.1 – Reference Data File – FDID and 5.1.3.2 – Reference Data File Submission – Customer:</p> <ul style="list-style-type: none"> • Rule 25 in Section 5.1.3.1 regarding scenarios where it is not permissible to implicitly end a Customer-to-FDID association • Rule 30 in Section 5.1.3.1 regarding populating the <i>DVPCustodianID</i> attribute when there is no clearing number or DTC number available • Rule 33 in Section 5.1.3.1 regarding how to report a change in <i>role</i> • Rule 36 in Section 5.1.3.1 and Rule 14 in Section 5.1.3.2 regarding Address Records for United States Military or Diplomatic addresses <p>Added Rules in Sections 5.1.3.1 – Reference Data File – FDID and 5.1.3.2 – Reference Data File Submission – Customer:</p> <ul style="list-style-type: none"> • Rule 28 in Section 5.1.3.1 and Rule 10 in Section 5.1.3.2 regarding address lines for FDID and Customer addresses • Rule 37 to Section 5.1.3.1 regarding <i>fdidDate</i> for an FDID that was closed and then reopened • Rule 15 to Section 5.1.3.2 regarding unparsed Natural Person Customer names <p>Clarified Rule 1 in Section 7 – Nightly Data Inconsistencies Feedback to clarify sentinel file posting</p> <p>Updated Error Codes: 21011, 22042, 22057, 22527, 24904, 24908 and 24911</p> <p>Updated previously reserved Error Codes 22072, 22073 and 22074 based on addition of <i>authTraderNamesList</i> to the FDID Record</p> <p>Added Error Codes: 22541 and 22542</p>

Version	Date	Author	Description
			<p>Added corresponding Error Codes to CAT CAIS Identifiers File Validation Warnings Table</p> <p>Added terms to the Appendix C: Glossary:</p> <ul style="list-style-type: none"> • Authorized Trader • CAT Customer • Discretion • Input Identifier • CAT NMS Plan-Defined PII • Sensitive Identifier <p>Replaced formal field names with the JSON attribute (for example, Update Notification with <i>updateNotification</i>)</p> <p>Correction of minor typos throughout</p> <p>Included applicable reference data references to Appendix E</p>

1. Introduction

1.1. CAT Overview

The Securities and Exchange Commission (SEC) approved Rule 613 under the Securities Exchange Act of 1934, which requires national securities exchanges and national securities associations (collectively, the Participants) to submit a national market system plan to create, implement, and maintain a consolidated audit trail ([CAT NMS Plan](#)) that would capture customer and order event information for orders in NMS Securities and OTC Equity Securities (Eligible Securities), across all markets, from the time of order inception through routing, cancellation, modification, execution, and allocation. The SEC approved the CAT NMS Plan on November 15, 2016.

In accordance with SEC Rule 613, the CAT NMS Plan requires a Central Repository that will comprehensively track orders throughout their lifecycle and identify the Participants and Industry Members handling them, as well as the account holders and authorized traders for any account that originates an order (Customers ¹). Specific data elements will be submitted to the Central Repository by Participants, Industry Members, and CAT Reporting Agents. CAT Reporting Agents may be third-party firms reporting on behalf of other entities, or may be outside parties that are not required to submit data to the CAT, but from which CAT may receive data per the CAT NMS Plan, such as the Securities Information Processors (SIPs).

The CAT NMS Plan also requires the selection of an entity as the Plan Processor to be responsible for performing the processing functions required by Rule 613 and the Plan. The Operating Committee of Consolidated Audit Trail, LLC, a governing body composed of representatives of the Participants, oversees the operation of the CAT. The duties of the Operating Committee are further described in Article IV of the CAT NMS Plan.

The CAT Customer & Account Information System (CAIS ²) is the separate system for submission of Customer and Account data. As part of the transition from Phase 1 reporting of only Account and LTID data, it will now be required for CAT Reporter Firms to submit full Customer and Account data.

¹ Customers are defined in SEC Rule 613(j)(3) as: (i) the account holder(s) of the account at a registered broker-dealer originating the order; and (ii) any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s).

² References to CAIS throughout this document are asserted to include both CAIS and the separate CCID Subsystem, unless otherwise explicitly noted.

Refer to SEC Rule 613, available at: <https://www.sec.gov/rules/final/2012/34-67457.pdf> for more details.

Refer also to CAT NMS Plan, available at: <https://catnmsplan.com/about-cat/cat-nms-plan>.

2. CAT Customer & Account Reporting Fundamentals

2.1. Key Data Elements

The sections below describe the key data elements of CAT used in CAT CAIS submission files. A CAT CAIS submission is comprised of two files – a CAIS Data file and a Transformed Identifiers file – in order to facilitate separation of the Customer and Account data from the Transformed Identifier used to uniquely reference a single Customer.

2.1.1. Firm Identifiers in File Submissions

The CAT submissions process relies on certain firm identifiers to determine whose data is being reported, and to determine and verify the authorization of the submitter of the data.

CAT Reporter CRD

The CAT Reporter CRD is the Industry Member's Central Registration Depository (CRD) number, used to ensure all Account and Customer reporting activity of a single Industry Member CAT Reporter can be consolidated at the firm level in CAT CAIS.

CAT Submitter ID

The CAT Submitter ID is a CAT assigned identifier for a firm that submits data to CAT. The Submitter ID uniquely identifies the Submitter and may be a different identifier than the CAT Reporter CRD. CAT Reporters may submit data for themselves or may authorize a separate Submitter to report on the CAT Reporter's behalf.

Authorization between CAT Reporters and Submitter is granted through a reporting relationship that will be entered by the CAT Reporter using the CAT Reporter Portal. When a file is received, CAT CAIS will verify that the CAT Reporter has authorized the Submitter to submit on its behalf.

Correspondent CRD

The Correspondent CRD is the CRD of the Introducing Broker or Correspondent firm whose Customer and Account data is kept on record at the CAT Reporter firm reporting to CAT. The Correspondent CRD must be a different identifier than the CAT Reporter CRD. For Accounts which are not correspondent Accounts, the Correspondent CRD attribute is not to be populated. CAT CAIS will not validate that a business relationship exists between the CAT Reporter and the Correspondent firm.

For CAT Reporters who are clearing firms reporting a Correspondent firm's data, the CAT Reporter must populate the *correspondentCRD* attribute with the CRD number of the Correspondent firm. The *correspondentCRD* attribute is at the main level within the JSON structure of the CAIS Data File, and as such will apply to all records within the file. The *correspondentCRD* attribute must not be included in the Identifiers File. If the clearing firm custodies Accounts for multiple Correspondent firms, Accounts for each individual correspondent must be grouped into a separate file. For firms reporting data of multiple correspondents, a separate file must be used for each *correspondentCRD*.

2.2. Reference Data

2.2.1. Firm Designated ID (FDID)

Section 6.4 of the CAT NMS Plan requires that for the original receipt or origination of an order, Industry Members must report the Firm Designated ID (FDID). FDID is defined in Section 1.1 of the CAT NMS Plan as:

“(1) a unique and persistent identifier for each trading account designated by Industry Members for purposes of providing data to the Central Repository provided, however, such identifier may not be the account number for such trading account if the trading account is not a proprietary account; (2) a unique and persistent relationship identifier when an Industry Member does not have an account number available to its order handling and/or execution system at the time of order receipt, provided, however, such identifier must be masked; or (3) a unique and persistent entity identifier when an employee of an Industry Member is exercising discretion over multiple client accounts and creates an aggregated order for which a trading account number of the Industry Member is not available at the time of order origination, where each such identifier is unique among all identifiers from any given Industry Member.”

Before the reporting of Customer Account Information and Customer Identifying Information begins in July 2022, regulatory users of the CAT will use FDIDs to identify whether the same Account is trading within a single broker-dealer. After the reporting of Customer Account Information and Customer Identifying Information begins, FDIDs will be used to link Accounts to specific Customers, including mapping Accounts with common ownership (for instance, where a Customer is associated with more than one FDID). Therefore, FDID is required to be populated on all Transaction Order events requiring an FDID for both equities and options.

Industry Members must assign a single FDID to each trading Account that is unique, persistent and consistent within the Industry Member firm and across all vendors and systems the Industry Member may use to report Transaction Order events requiring an FDID to CAT and associated Customer and Account Information for the FDID to CAT CAIS, and unique across time. For example, if an Industry Member uses

multiple vendors for reporting Transaction data to CAT, the Industry Member must ensure that all vendors use the same FDID for a particular trading Account in all CAT Transaction Order events requiring an FDID, and that the same FDID associated with the trading Account is submitted to the Customer and Account Information System.

Examples of what an FDID would represent include:

- Individual Customer Account Number
- Institutional Customer Account Number
- Account Number of Average Price Account Designated for a Specific Customer (e.g., Master Account or agency Representative Order scenarios)
- Account Number of Firm Average Price Account Shared Across Customers (e.g., Master Account, Account Used For Agency Representative Order Flows)
- Proprietary Trading Account Number
- Industry Member assigned identifier representing a trading relationship (Relationship ID) can be used when the trading account structure is unavailable at the time the order was placed
- Industry Member assigned identifier (Entity ID) representing the Industry Member's discretionary relationship with the client when an employee of the Industry Member is exercising discretion over multiple client accounts and creates an aggregated order for which a trading account number of the Industry Member is unavailable at the time of order origination

An actual customer account number must not be used as the FDID for a customer Account for CAT reporting and the same guidance would apply to an FDID representing a Relationship ID. See [CAT FAQ M2](#) for more information on the prohibition on use of actual account numbers, and [CAT FAQs M10](#) and [M14](#) for more information on masking. Also, refer to the [CAT Industry Presentation](#) on FDID for additional information.

A change/replacement in the FDID value associated with a particular trading account, Relationship ID, and Entity ID would be an isolated event that is only permissible in certain limited circumstances, such as system migration, change of vendors, change in Clearing Firm, and change in masking methodology used for FDID values. See CAT [FAQ M16](#) for more information on replacing/changing an FDID.

2.2.2. Large Trader ID (LTID) and Unidentified Large Trader ID (ULTID)

LTID is an identifier assigned by the SEC to a "large trader," defined as a person whose transactions in NMS securities equal or exceed:

- 2 Million shares or \$20 Million in any single calendar day; OR
- 20 Million shares or \$200 Million in any calendar month

A person qualifying as a large trader is required to submit Form 13H to the Commission, and be assigned an LTID. In accordance with the CAT NMS plan as amended for LTID, CAT Reporter firms are required to report all LTIDs associated to their FDIDs as part of their Customer and Account reporting. Thus, CAT Reporter firms are required to obtain the LTID for each Account (to the extent that an LTID exists).

In the scenario a CAT Reporter that is a clearing firm determines a person (which includes both natural persons and legal entities under Section 13(h)(8)(e) of the Exchange Act) would qualify as a large trader, but the firm has not yet been provided with an LTID by the person, the clearing firm is required to assign an ULTID to the person until such time as the person provides their LTID. Any CAT Reporter that is a clearing firm with an obligation to assign an ULTID under the large trader rule is required to report any assigned ULTIDs associated to their reported customers as part of their Customer and Account reporting. CAT Reporters that are not self-clearing and do not have an obligation to assign ULTIDs are not required to report ULTIDs to CAT as they will have no such number to report. In Full CAIS submission file pairs, the LTID remains associated to the FDID Record, not the Customer Record.

Please refer to [Section 4:CAIS Reporting](#) – for information regarding the format requirements of the LTID and ULTID. For purposes of the CAT CAIS Reporting Technical Specification, references to LTID attributes and scenarios throughout the document are intended to cover both LTID and ULTID usage in accordance with the reporting obligations noted above.

2.2.3. FDID Open Date

The FDID open date is included in the CAIS data schema as *fdidDate*. The *fdidDate* field must be populated with either:

- Date in which the account was opened, or
- The Account Effective Date, as defined in Section 1.1 of the Plan, in the following circumstances:
 - The Industry Member has established a trading relationship, but not an account, with an institution or client
 - Proprietary trading accounts of the Industry Member
 - Accounts opened prior to the implementation date of the CAT NMS Plan applicable to the relevant CAT Reporter
 - The Industry Member has acquired another Industry Member and the Account Open Date was changed to a date value on or after the completion of the merger

2.2.4. Customer

The CAT NMS Plan defines the term “Customer” as having the same meaning provided in SEC Rule 613(j)(3), which is as follows:

- (i) The account holder(s) of the account at a registered broker-dealer originating the order; and
- (ii) any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s).

2.2.5. Input Identifiers

Input Identifiers is a generic term for the types of identifiers used to identify unique Customer Records.

These identifiers include:

- Social Security Number (SSN)
- Individual Taxpayer Identification Number (ITIN)
- Employer Identification Number (EIN)
- Foreign Identifiers (FOREIGN)

Input Identifiers are always translated to Transformed Identifier (TID) values in accordance with the guidance in [Section 3.4: Translation of Input Identifiers to TID Values](#), prior to submission to CAT within the Transformed Identifiers file. In the event that a CAT Reporter Firm has multiple versions of a CAT Customer, all versions must be reconciled to a single Input Identifier and therefore a single *tidValue* in accordance with Plan requirements.

Social Security Number and Individual Taxpayer Identification Number are considered Sensitive Identifiers and **must not** be submitted in the CAIS Data file. However, the Employer Identification Number (EIN) is not a Sensitive Identifier and therefore must be submitted in the CAIS Data file as a plain text data element for a Legal Entity Customer when the EIN was used to generate the TID of the Customer. If an SSN, ITIN, or EIN is available for the Customer, it must always be used as the Input Identifier and therefore a single *tidValue* across all Customer Records submitted by the CAT Reporter, irrespective if such Customer Records are associated with different FDID Records – even if other Input Identifiers (i.e., Foreign) exist. Input Identifiers used to generate TID values must be input in valid format – that is, 999-99-9999 for SSN or ITIN, and 99-9999999 for EIN. Format validation will not occur for ‘FOREIGN’ Input Identifiers. Refer to [FAQ Q57](#) for details regarding handling the selection of a specific Input Identifier for generating a *tidValue* when a CAT Reporter has multiple values for the same Input Identifier type for a CAT Customer.

The Foreign Identifier type is only permissible to use for foreign Natural Person or Legal Entity Customers for which an SSN/ITIN or EIN is not available. The value of the Foreign Identifier, unless the identifier is a Legal Entity Identifier (LEI), is considered a Sensitive Identifier and **must not** be submitted in the CAIS Data File. Examples of identifiers reported as the Foreign Identifier type include:

- Legal Entity Identifier (LEI)
- EU Member State National Client Identifier (NCI) in accordance with MIFID II

- Country of Domicile and Passport Number
- National Identity Card
- Permanent Resident Card Number
- Driver's License
- Other Government-Issued Identifier

In the event that a CAT Reporter Firm has more than one Foreign Identifier collected for a CAT Customer (e.g., a National Registration and a Passport for a Natural Person) – but does not have an EIN, SSN, nor ITIN for the Customer – the CAT Reporter Firm must always use a single, consistent Input Identifier to generate the *tidValue* for the Customer across all Customer Records submitted by the CAT Reporter, irrespective if such Customer Records are associated with different FDID Records. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer:

1. National Registration or Tax Identifier – usable for Natural Person and Legal Entity CAT Customers
2. LEI – usable only for Legal Entity CAT Customers
3. Country of Domicile and Passport Number – usable only for Natural Person CAT Customers
4. Permanent Resident Identifier – usable only for Natural Person CAT Customers
5. Driver's License – usable only for Natural Person CAT Customers
6. Other Government-Issued Identifier – usable for Natural Person and Legal Entity CAT Customers

When a Foreign Identifier is used to generate a TID and included in the CAIS Identifiers file submission, it is also required for the CAT Reporter Firm to state what type of identifier was used to generate the TID.

In the event the CAT Reporter obtains a new Input Identifier for a Customer that was previously reported to CAIS, the *tidValue* for all versions of the Customer must be updated to reflect the same *tidValue*, and propagated across all Customer-to-FDID associations at the CAT Reporter firm. See [Section 3.2: Replacement of Transformed Identifier \(TID\)](#) for more information.

2.2.6. Transformed Identifier (TID)

The Transformed Identifier (TID) is a hashed version of the Input Identifier, submitted by the CAT Reporter to CAT in place of the Input Identifier, in accordance with the exemptive relief granted by the SEC on March 17, 2020. The CAT Reporter has the responsibility to translate Input Identifiers to TID values prior to submission, in accordance with the mathematical logic provided in [Section 3.4: Translation of Input Identifiers to TID Values](#). Input Identifiers used to generate TID values must be input in valid format – that is, 999-99-9999 for SSN or ITIN, and 99-9999999 for EIN. Format validation will not occur for 'FOREIGN' Input Identifiers.

2.2.7. Customer ID

The Customer ID, also known as CAT Customer ID or CCID, is a unique identifier generated by the Plan Processor, that is defined within SEC Rule 613(j)(5) as “with respect to a customer, a code that uniquely and consistently identifies such customer for purposes of providing data to the central repository.” The CCID is a globally unique identifier generated for each unique TID value generated from a well-formatted and valid Input Identifier, in a way that is not reversible to the TID or textual Input Identifier value. The translation of TID to CCID is completed in the CCID Subsystem, in isolation from any of the Customer or Account reference data.

The CCID value is never provided to CAT Reporters or Submitters and is only used within CAT to uniquely reference a single Customer.

2.2.8. CCID Subsystem

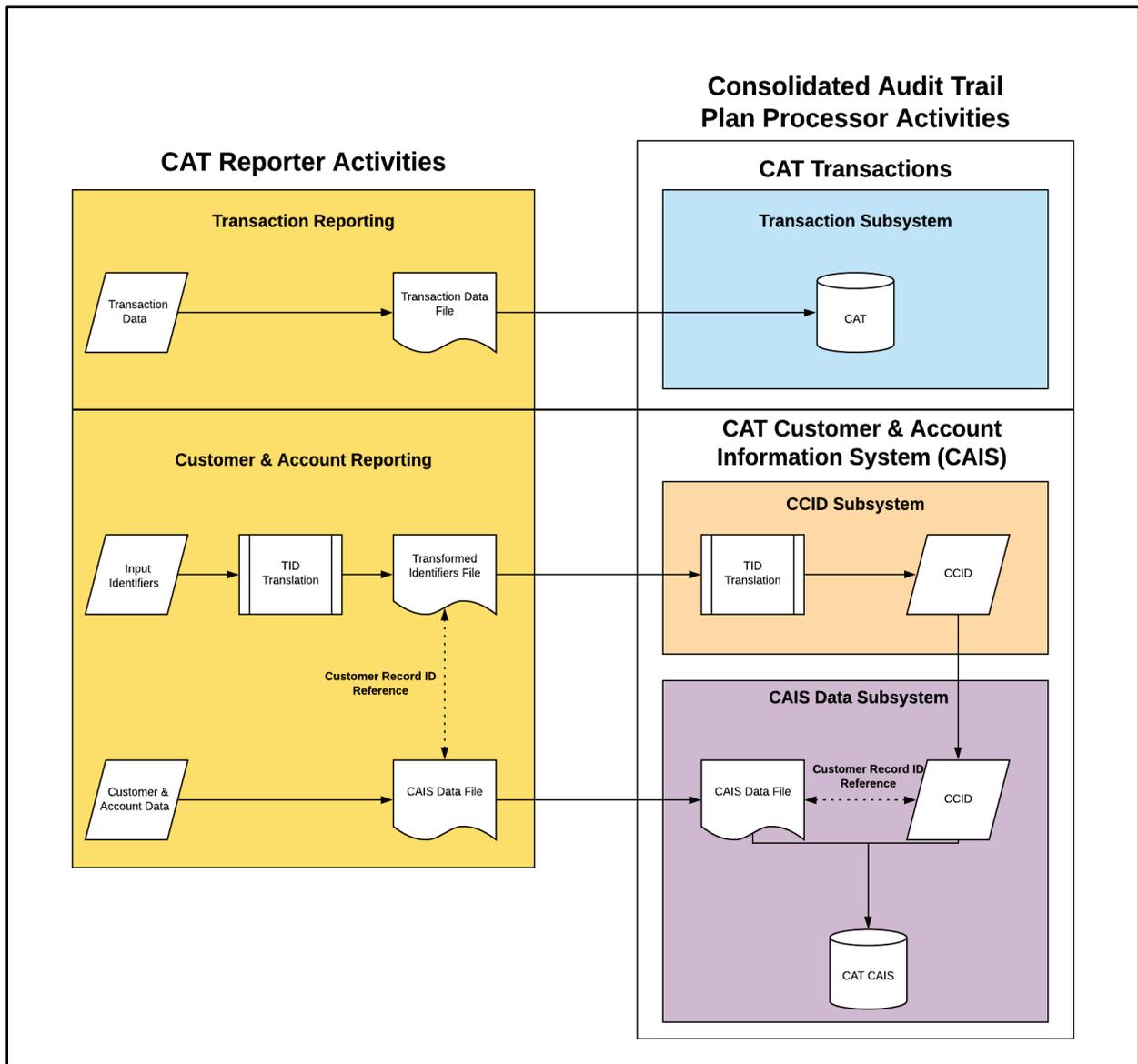
The CCID Subsystem is an isolated subsystem of CAT CAIS that exists solely to translate input TID values into CCID values. The Transformed Identifiers file, sent only to the CCID Subsystem and containing the combination of the Customer Record ID pointer and TID, translates the TID to CCID, and passes the combination of Customer Record ID and CCID to the CAIS Data Subsystem, where the Customer Record ID is used to associate the assigned CCID with the corresponding Customer Record.

2.2.9. CAIS Data Subsystem

The CAIS Data Subsystem is an isolated subsystem of CAT CAIS that exists for receipt and storage of Customer and Account data. The Data file, sent only to the CAIS Data Subsystem and containing the Customer and Account submission data, receives the combination of Customer Record ID and CCID from the CCID Subsystem, and associates the assigned CCID with the corresponding Customer data.

The following diagram provides an overview of the flow of translating Input Identifiers to TID values by the reporting firm, the separation of the TID data from the Customer and Account reference data, and the translation of TID values to CCID values in the isolated CCID Subsystem so that TID is never known to the CAIS Data Subsystem.

Figure 1: CAT Reporting Activities



2.2.10. Reportable Identifier

A Reportable Identifier is a generic term used to reference any Customer identifiers that are to be included in plain text form in submissions to CAT in the CAIS Data file. It is both possible and acceptable for an Input Identifier to also be a Reportable Identifier. The list of Reportable Identifiers includes:

- Employer Identification Number (EIN)
- Legal Entity Identifier (LEI)
- Large Trader ID (LTID)/Unidentified Large Trader ID (ULTID)

2.2.11. Data Inconsistency

In accordance with the CAT NMS Plan Appendix D, Section 9.4, the CAT system must implement procedures and mechanisms to handle both minor and material inconsistencies in Customer information submitted to CAT.

Material Inconsistencies require correction within the established Deadline of Repair for Errors Identified by CAIS described in the [Section 5.4.2 Deadline of Repair for Errors Identified by CAT CAIS](#) section of this document. **Minor Inconsistencies** are provided to the CAT Reporter Firms for informational purposes only, and do not require correction. There are no minor inconsistencies defined at this time, however the infrastructure is in place in accordance with the CAT NMS Plan requirements.

There are two areas in which Inconsistencies can occur (see [Table 3: Customer Data Inconsistencies](#) for a list of the “material attributes”):

- Inconsistent material attributes across multiple submission files of a single Industry Member
- Inconsistent material attributes across multiple submission files of multiple Industry Members.

The following table details the attribute set for Customer Record data submissions and what level of Inconsistency checking is applied against the attribute, as well as whether or not it is possible to provide an Update Confirmation of the attribute.

Table 3: Customer Data Inconsistencies

Material Attribute	Customer Record Type	Material/Minor Inconsistency Validation	Proactive Update Notification Eligible	Resolving Update Notification Eligible
<i>tidType</i> of 'FOREIGN' reported as both a Natural Person and Legal Entity Customer types when the <i>foreignTIDType</i> value of 'NATIONALID' or 'OTHGOVT' is selected	N/A	Material	Yes	Yes

<i>yearOfBirth</i>	Natural Person	Material	Yes	Yes
<i>ein</i>	Legal Entity	Material	No	Yes

2.2.12. Material Inconsistencies Procedure

The process by which Material Inconsistencies are identified and reported back to Industry Members is known as the Material Inconsistencies Procedure.

All Customer Records with an active association to an active FDID will be included in the Material Inconsistencies scans. For the Material Inconsistencies Procedure, a Customer Record is considered to have an active association to an active FDID if:

- The Customer Record is association to any FDID record that has no set *fdidEndDate* or has an *fdidEndDate* set to a date greater than the current calendar date; or
- The Customer Record has no *roleEndDate* or has a *roleEndDate* greater than the current calendar date.

Notification of Material Inconsistencies, as well as the window for Material Inconsistencies repair, will occur in two phases, as follows:

- The Industry Member whose submission data is Materially Inconsistent when compared to the data currently stored within CAIS - whether the currently stored data was entered by that same Industry Member or another Industry Member - is referred to as the “Triggering Firm”. The Triggering Firm triggers a Material Inconsistency by submitting Customer data, such as *yearOfBirth* or *ein*, which differs materially from the same attributes previously reported by the Triggering Firm or another Industry Member for the same Customer. Information regarding the identified Material Inconsistency will be included in the Feedback file for the firm’s submission and the timeframe for repair will start as of the CAT Trading Day of the firm’s submission to CAIS. The Triggering Firm must always take action on a Material Inconsistency. It must either:
 - Confirm the accuracy of the data it submitted to CAIS by resubmitting the entire FDID Record in its current state with all required LTID and Customer associations and including the *updateNotification* attribute populated with ‘true’.
 - Or submit an update to the Customer Record in a subsequent submission by resubmitting the entire FDID Record with the updated Customer information and including the *updateNotification* attribute populated with ‘true’.

See Section 2.2.13 for more information on Material Inconsistency obligations for Triggering Firms.

- The Industry Member whose data was previously stored within CAIS, whose data is now determined to be Inconsistent as a result of the submission of the same Customer by another Industry Member, is known as the “Impacted Firm”. The Impacted Firm is impacted by

inconsistencies. The Impacted Firm's notification and subsequent correction window will not start until the Triggering Firm first takes action to resolve its Inconsistency notification. If the Triggering Firm confirms to the validity of the data that triggered an inconsistency, the Impacted Firm will then be notified of the Inconsistency via the 'Inconsistency Feedback' file, at which time their repair window will start and the Impacted Firm must take action on the Inconsistency notification. If the Triggering Firm corrects its submission data, by submitting an update to the Customer Record resulting in their data being consistent with the existing record in CAIS, the Impacted Firm will not be notified of the temporary Inconsistency for the Customer, and would not need to take any action.

See [Section 2.2.14](#) for more information on Material Inconsistency obligations for Impacted Firms.

2.2.13. Material Inconsistency Obligations for Triggering Firm

A Triggering Firm triggers, or creates, a Material Inconsistency if the Triggering Firm reports data for a Customer which differs materially from the data another Industry Member reported for the same Customer, or which differs materially from the data the Triggering Firm previously reported for the Customer.

For example, an Industry Member submits a Customer to CAIS having a *yearOfBirth* of '1980' and the record is accepted. Later, the same Industry Member submits the same Customer to CAIS and it is accepted, this time having a *yearOfBirth* of '1908'. The second submission will result in a Material Inconsistency for the Customer Record. Alternatively, if CAT Reporter A submits a Customer to CAIS having a *yearOfBirth* of '1980' and it is accepted, then CAT Reporter B submits the same Customer to CAIS having a *yearOfBirth* of '1970' and it is accepted, CAT Reporter B has triggered a Material Inconsistency for the Customer Record.

Once an Industry Member has triggered an inconsistency, the Triggering Firm always take action on a Material Inconsistency. It must either:

- Confirm the accuracy of the data it submitted to CAIS by resubmitting the entire FDID Record in its current state with all required LTID and Customer associations and including the *updateNotification* attribute populated with 'true'.
- Or submit an update to the Customer Record in a subsequent submission by resubmitting the entire FDID Record with the updated Customer information and including the *updateNotification* attribute populated with 'true'.

An inconsistency repair window will start when the inconsistency is triggered, and the Triggering Firm will have three CAIS processing days to resolve the inconsistency in a timely manner. If the inconsistency is repaired after the inconsistency repair window has ended, it will be recorded as a late repair for CAIS

compliance purposes. Submission of a CAT Customer Record with an outstanding inconsistency will result in a rejection unless the *updateNotification* attribute is set to 'true' for that Customer Record. Once the Industry Member has submitted the Customer Record with an *updateNotification* set to 'true', a "grace period" will start and the Industry Member will not receive any interfirm inconsistencies for that record for the next 365 days.

Resolving a Material Inconsistency requires a CAT Reporter to follow the Material Inconsistency resolution procedures to confirm or correct the record that generated the Material Inconsistency. It does not require the CAT Reporter to contact their Customer to confirm the information. See [FAQ Q55](#) for more information.

2.2.14. Material Inconsistency Obligations for Impacted Firm

An Impacted Firm does not trigger an inconsistency via submission to CAIS, but instead is impacted by inconsistencies in the Impacted Firm's data triggered by another CAT Reporter. For example, CAT Reporter A submits a Customer to CAIS having a *yearOfBirth* of '1980' and it is accepted. Later, CAT Reporter B submits the same Customer to CAIS having a *yearOfBirth* of '1970'. This submission would result in a Material Inconsistency triggered by CAT Reporter B (the Triggering Firm), but which impacts CAT Reporter A (the Impacted Firm).

Impacted Firms will be notified of Material Inconsistencies impacting their data via the Nightly Inconsistencies Feedback File. Refer to [Section 7: Nightly Data Inconsistencies Feedback](#) for more information on the Nightly Inconsistencies Feedback File. Once the inconsistency is reported within the Nightly Inconsistencies Feedback File, the inconsistency repair window for the Impacted Firm starts. The Impacted Firm must resolve the inconsistency by either:

- Confirming the accuracy of the data it submitted to CAIS by resubmitting the entire FDID Record in its current state with all required LTID and Customer associations and including the *updateNotification* attribute populated with 'true'.
- Or submitting an update to the Customer Record in a subsequent submission by resubmitting the entire FDID Record with the updated Customer information and including the *updateNotification* attribute populated with 'true'.

The Impacted Firm will have three CAIS processing days to resolve the inconsistency in a timely manner. If the inconsistency is repaired after the inconsistency repair window has ended, it will be recorded as a late repair for CAIS compliance purposes. Submission of a CAT Customer Record with an outstanding inconsistency will result in a rejection unless the *updateNotification* attribute is set to 'true' for that Customer Record. Once the Industry Member has submitted the Customer Record with an *updateNotification* set to 'true', a "grace period" will start and the Industry Member will not receive any interfirm inconsistencies for that record for the next 365 days.

Resolving a Material Inconsistency requires a CAT Reporter to follow the Material Inconsistency resolution procedures to confirm or correct the record that generated the Material Inconsistency. It does not require the CAT Reporter to contact their Customer to confirm the information. See [FAQ Q55](#) for more information.

2.2.15. Notification of Customer Record Updates

In the event that a CAT Reporter Firm is submitting an update to key identifying attributes for its previously submitted Customer Record which would result in the identification of a Material Inconsistency, the CAT Reporter may include notification of the intent to update these attributes within their submission file. When the CAT Reporter includes this proactive notification, CAIS will not generate a Material Inconsistency notification for the reported Customer. Instead, CAIS will include an Update Confirmation notification in the feedback file for the CAT Reporter Firm, confirming the update to a key identifying attribute was accepted by CAIS.

If a CAT Reporter Firm does not appropriately use the *updateNotification* function, they will be notified that the Customer data they submitted to CAT resulted in a Material Inconsistency. The CAT Reporter Firm must then:

- Confirm the accuracy of the data it submitted to CAIS by resubmitting the entire FDID Record in its current state with all required LTID and Customer associations and including the *updateNotification* attribute populated with 'true'.
- Or submit an update to the Customer Record in a subsequent submission by resubmitting the entire FDID Record with the updated Customer information and including the *updateNotification* attribute populated with 'true'.

This will result in closure of the Material Inconsistency. Failure to include the *updateNotification* attribute populated with 'true' when submitting a CAT Customer that has an open Material Inconsistency will result in a rejection against the submitted CAT Customer, and will not result in any update to the stored data for the inconsistent Customer Record nor closure of the Material Inconsistency.

In the event that a CAT Reporter has previously submitted a specific combination of a *foreignTIDType* (specifically the 'OTHGOVT' and 'NATIONALID'), *foreignTIDCountryCd*, and Foreign *tidValue* with a Customer Record Type – that is, Natural Person or Legal Entity – and subsequently submits the same combination of a *foreignTIDType*, *foreignTIDCountryCd*, and Foreign *tidValue* with a different Customer Record Type, a Material Inconsistency will be identified against the two Customer Records. To resolve this Material Inconsistency, the CAT Reporter Firm must submit the appropriate Customer Record Type with the *updateNotification* attribute populated with 'true'. When this submission occurs, the Plan Processor will end the incorrect Customer Record Type and close both Material Inconsistencies.

The following tables exemplify the Inconsistency Repair Deadline for Material Inconsistencies.

Table 4: Triggered Inconsistencies

Event Occurs/IM Receives Data	Holiday	Initial Report Due (T+1)	Triggered Inconsistency Repair Due (T+3)
Monday 2:20 PM ET	N/A	Tuesday 8:00 AM ET	Thursday 5:00 PM ET
Monday 11:40 PM ET	N/A	Wednesday 8:00 AM ET	Friday 5:00 PM ET
Friday 11:00 AM ET	N/A	Monday 8:00 AM ET	Wednesday 5:00 PM ET
Friday 4:02 PM ET	N/A	Monday 8:00 AM ET	Wednesday 5:00 PM ET
Friday 4:02 PM ET	Next Monday	Tuesday 8:00 AM ET	Thursday 5:00 PM ET
Wednesday 3:00 PM ET	Thursday, Friday is half day	Friday 8:00 AM ET	Tuesday 5:00 PM ET
Saturday 11:15 AM ET	N/A	Tuesday 8:00 AM ET	Thursday 5:00 PM ET
Saturday 11:15 AM ET	Next Monday	Wednesday 8:00 AM ET	Friday 5:00 PM ET
Monday 10:00 AM ET (holiday)	On event date	Wednesday 8:00 AM ET	Friday 5:00 PM ET

Table 5: Impacted Inconsistencies

Triggering Firm Resolves Inconsistency	Holiday	Impacted Firm Notified No Later Than (T+1)	Impacted Firm Repair Due (T+3)
Monday 2:20 PM ET	N/A	Tuesday 8:00 AM ET	Thursday 5:00 PM ET
Monday 11:40 PM ET	N/A	Wednesday 8:00 AM ET	Friday 5:00 PM ET
Friday 11:00 AM ET	N/A	Monday 8:00 AM ET	Wednesday 5:00 PM ET
Friday 4:02 PM ET	N/A	Monday 8:00 AM ET	Wednesday 5:00 PM ET
Friday 4:02 PM ET	Next Monday	Tuesday 8:00 AM ET	Thursday 5:00 PM ET
Wednesday 3:00 PM ET	Thursday, Friday is half day	Friday 8:00 AM ET	Tuesday 5:00 PM ET
Saturday 11:15 AM ET	N/A	Tuesday 8:00 AM ET	Thursday 5:00 PM ET
Saturday 11:15 AM ET	Next Monday	Wednesday 8:00 AM ET	Friday 5:00 PM ET
Monday 10:00 AM ET (holiday)	On event date	Wednesday 8:00 AM ET	Friday 5:00 PM ET

2.3. Data Types

CAT Customer and Account data must be reported using JSON text files. Data types used throughout this document are described below. Data types used for CAT Customer and Account reporting are a subset of the data types used for CAT transaction reporting, with the following differences:

- Timestamp – only STRING versions of timestamp are supported in Customer and Account reporting.

To support JSON submissions, the Industry Member Customer & Account Schema (JSON) file is available on the CAT public website that describes each data type with required representation formats.

2.3.1. Data Validation Based on Data Types

All Customer and Account data submitted to CAT will be validated based on the defined data type of each item, including proper formatting and range checking. Examples of accepted values are detailed in the table below. Valid values for Choice fields are defined in the Data Dictionary for each data element. Valid data values, ranges, and formats will be specified in the record schema files, which will be used to validate submitted data element values. Records and values that fail validation will be rejected and will be reported as feedback to the CAT Reporter and Data Submitter as detailed in [Section 6](#).

Table 6: Data Types

Data Type	JSON Type	Description
Unsigned	NUMBER	An unsigned value, greater than or equal to zero, with no decimal fraction component, in the inclusive range from 0 to 9,223,372,036,854,775,807 (the same range as a 63-bit unsigned integer). JSON parsing does not allow for leading zero (0) values in a Number JSON type field. Any leading zero characters in a Number JSON type field will result in a file integrity error for invalid JSON.
Boolean	BOOLEAN	A value with two choices: 'true' or 'false'. In JSON representation, if the field is not present, the value is considered 'false'.
Alphanumeric	STRING	A string, composed only of letters and digits [a-zA-Z0-9]. When an Alphanumeric type is described, it will include a number, indicating the maximum length of the field. For example, Alphanumeric (7) means that the field can contain up to 7 characters. Alphanumeric values are case sensitive.
Text	STRING	<p>A string, composed of any printable ASCII character between 32 and 126. The string may not include the following characters which serve as delimiters:</p> <ul style="list-style-type: none"> • comma (ASCII decimal 44, hex 2C), • pipe (ASCII decimal 124, hex 7C), • double quote (ASCII decimal 34, hex 22), and • @ (ASCII decimal 64, hex 40). <p>When a Text data type is described, it will include a number, indicating the maximum length of the field. For example, Text (7) means that the field can contain up to 7 characters. Text values are case sensitive.</p> <p>When represented in JSON, the following rule applies: Backslash '\ ' is a reserved printable character in JSON and must be escaped in order to be used in strings by inserting a backslash prior to it within the string. For example: <i>firmDesignatedID</i> = 1234\ABCD must be reported to CAT as "firmDesignatedID": "1234\ABCD". If the backslash is not escaped, the submitted record will be rejected. Escape characters do not participate in the field value length.</p>

Data Type	JSON Type	Description
Extended Text	STRING	<p>A string, composed of any printable ASCII character between 32 and 255.</p> <p>When an Extended Text data type is described, it will include a number, indicating the maximum length of the field. For example, Extended Text (7) means that the field can contain up to 7 characters. Extended Text values are case sensitive.</p> <p>When represented in JSON, the following rule applies: Backslash '\ ' and double quote "" are reserved printable characters in JSON and must be escaped in order to be used in strings by inserting a backslash prior to the reserved character within the string. For example: <i>legalName = 12"34\ABCD</i> must be reported to CAT as "legalName": "12\34\ABCD". If the backslash or double quote is not escaped, the submitted record will be rejected. Escape characters do not participate in the field value length.</p>
Date	NUMBER	An 8-digit integer representing the date in YYYYMMDD. JSON parsing does not allow for leading zero (0) values in a Number JSON type field. Any leading zero characters in a Number JSON type field will result in a file integrity error for invalid JSON.
Year	NUMBER	A 4-digit integer representing the year in YYYY. JSON parsing does not allow for leading zero (0) values in a Number JSON type field. Any leading zero characters in a Number JSON type field will result in a file integrity error for invalid JSON.
Timestamp	STRING	<p>A timestamp represents a moment in time. All timestamps must be in Eastern Time (ET).</p> <p>Timestamps formatted as a STRING have a maximum length of 25 and are formatted as 'YYYYMMDD HHMMSS.CCCNNNNNN' with the Date and Time portions, separated by a space (ASCII decimal 32, hex 20) or the letter T (ASCII decimal 84, hex 54).</p> <ul style="list-style-type: none"> The Date portion must include four-digit year, two-digit month, and two-digit day. Valid values: YYYY = 0000 - 9999, MM = 01 - 12, DD = 01 - 31. The Time portion must include a two-digit hour, two-digit minute, and two-digit seconds. Valid values: HH = 00 - 23, MM = 01 - 59, SS = 01 - 59, CCC = 000 - 999, NNNNNN = 000000 - 999999. <p>Examples which comply with Timestamp in STRING format:</p> <ul style="list-style-type: none"> 20190617T000120.000000000 20190617T000120 20190617T000120.000 20170107T213000.123456789 20170107 213000.123456789 20190617 000120.123000000 <p>Examples which do not comply with Timestamp in STRING format:</p> <ul style="list-style-type: none"> 20190617T0120 20190617T000120.
Name/Value Pairs	OBJECT	An object composed of a list of zero or more attributes where each attribute is either a name with no value, or a name with an accompanying value. Multiple attributes are separated by a delimiter.

Data Type	JSON Type	Description
		<p>When represented in JSON, the following rules apply:</p> <ul style="list-style-type: none"> • The OBJECT is contained within curly brackets { } • Name/Value Pairs are comma separated • A value accompanied by a name must be formatted as per the data type syntax required in JSON
Array	ARRAY	<p>A list of 0, 1 or more values of the same data type.</p> <p>When represented in JSON, the following rules apply:</p> <ul style="list-style-type: none"> • ARRAY is within a set of brackets [] • Elements within the array are comma separated.
Choice	STRING	<p>A Text field with an explicit list of acceptable values. The Data Dictionary section of this document lists the acceptable values for each Choice field.</p>
Multi-Dimensional Array	Multi-Dimensional ARRAY	<p>A compound object that consists of an array of objects. The JSON syntax for this data type is consistent with other Multi-Dimensional Array JSON Types. Multi-Dimensional Array is specified as the data type within the Submissions file as well as the Feedback response file.</p> <p>When represented in JSON, the following rules apply:</p> <ul style="list-style-type: none"> • ARRAY is within a set of brackets [] • Each OBJECT contained in the ARRAY is within curly brackets { } • Elements within each object are comma separated • Conditional elements that do not have a value are not required to be included.
Hexadecimal	String	<p>A string, composed only of valid hexadecimal characters [a-fA-F0-9]. When a Hexadecimal type is described, it will include a number, indicating the maximum length of the field. For example, Hexadecimal (7) means that the field can contain up to 7 characters. Hexadecimal values are case insensitive.</p>

2.3.2. Required, Conditional, and Optional Fields

Throughout this document, record attribute fields will be defined. Each field will be notated with the abbreviation R, C, or O to represent whether it is required, conditional, or optional. This codification will appear within each row of a table describing a field.

Table 7: Include Key

Value	Abbreviation	Description
Required	R	Required for the given record. This field must always be included.
Conditional	C	Conditionally required for the submission, either when paired with another attribute or attributes, or when such data is applicable to the CAT Customer and/or FDID Record.

Value	Abbreviation	Description
Optional	O	Optional for the given record. May be included at the discretion of the CAT Reporter/Submitter.

3. Special Reporting Requirements

3.1. Replacement of FDIDs

The current functionality provided to CAT Reporters enables the replacement of a single FDID Record at a time using the *replacedByFDID* attribute. If a CAT Reporter desires to replace one or more of their FDID Records due to a system migration or one of the limited circumstances outlined in [CAT FAQ M16](#), they are able to do so by submitting each individual FDID to be replaced and the *replacedByFDID* attribute indicating which FDID has taken its place. There is no limit on how many FDID Records can be replaced within a submission file, other than the standing record limits for file transmission.

3.2. Replacement of Transformed Identifier (TID)

In order to satisfy Plan requirements for a unique CAT Customer ID, Industry Members must replace a Customer's *tidValue* in scenarios where a Customer's Input Identifier changes. In the event the CAT Reporter obtains a new Input Identifier for a Customer that was previously submitted to CAIS, all versions of the Customer must be updated and reconciled to the updated Input Identifier value and therefore reflect a single *tidValue* propagated across all Customer-to-FDID associations at the CAT Reporter firm, in accordance with Plan requirements. There are two ways to replace the Customer's Input Identifier in CAIS and the manner by which replacement must be reported to CAIS depends on why it is being updated:

- In one scenario, the Input Identifier was legally changed or the Industry Member obtained an Input Identifier that supersedes the current identifier according to the hierarchy identified in [Section 2.2.5](#). Examples include, but are not limited to: when a Customer's Input Identifier was changed from an ITIN to an SSN, a Foreign Legal Entity or Natural Person CAT Customer obtained a US-assigned Input Identifier, a Customer's passport number changed upon reissuance, or a Legal Entity Customer's EIN changed due to a corporate merger or acquisition. In this scenario, Industry Members must report this to CAIS by:
 1. Including in the Transformed Identifiers file:
 - a. A record for the Customer's previous TID noting the *replacedByTID*, *replacedByTIDType* and the Customer's new Transformed Identifier (TID); and
 - b. A record for the Customer's new TID; and
 2. Including in the Data File:

- a. A record for the Customer being replaced including a *roleEndReason* of 'REPLACED' and a *roleEndDate*. The Customer-to-FDID association must be explicitly ended in the submission file. It is not permissible to end the Customer-to-FDID association by omitting the *roleEndReason* and *roleEndDate* attributes.
 - b. A new record for the Customer with an active *role* and *roleStartDate*. The *roleStartDate* must represent the date on which the Customer entered into the specified *role*; not the date that the *tidValue* was replaced.
- In the scenario when a Customer's Transformed Input Identifier (TID) was initially submitted to and accepted by CAIS based on an Input Identifier value that was later determined to be incorrect and was never intended to be associated with the Customer, it is not permissible to use the *replacedByTID* functionality. Examples include, but are not limited to: when a *tidValue* was generated from an Input Identifier value that was incorrect and never associated with the Customer due to a manual entry error in the CAT Reporter's Customer database or the Customer initially provided the Industry Member with an incorrect Input Identifier. Upon receiving and determining the correct Input Identifier for the Customer, the Industry Member must update the record by:
 1. Including in the Transformed Identifiers file:
 - a. A record for the Customer's previous, incorrect *tidValue*.
 - b. A record for the Customer's new *tidValue* that was generated from the correct Input Identifier value for the Customer;
 2. Including in the Data File:
 - a. A record for the Customer associated with the *tidValue* generated from the incorrect Input Identifier value, with a *roleEndReason* of 'CORRECTION' and a *roleEndDate* populated with the same date as the *roleStartDate* to indicate that the Customer Record should not have been associated to the FDID. The Customer-to-FDID association must be explicitly ended in the submission file and cannot be omitted.
 - b. A new record for the Customer associated with the *tidValue* generated from the correct Input Identifier value, with a *roleStartDate* reflecting the date the Customer originally entered into the specified *role* and not the date that the new *tidValue* was generated based on the correct Input Identifier.

3.3. Mass Transfer of FDIDs across CAT Reporter Firms

In the instance of Account transfers from one CAT Reporter Firm to another, resulting from a merger, acquisition, or divestiture, it is required by the CAT NMS Plan to have a means of linking the Accounts from the prior Industry Member to those of the new Industry Member. There will be two mechanisms enacted by which this activity can occur:

- Automated Transfer Procedure- A procedure will be created to automate transfer of all reported FDIDs with no *fdidEndDate* set (or an *fdidEndDate* set in the future) from the transferring CAT Reporter CRD to the receiving CAT Reporter CRD. The receiving CAT Reporter Firm must contact the FINRA CAT Helpdesk to provide notification of an upcoming transfer event, including the expected date for closure of the transfer. Refer to [Section 3.3.1](#) for more information.
- Transfers enacted in CAIS Data Reporting- Additional attributes will be added to the CAIS Data Submission file that allows the transferring and receiving CAT Reporter Firms to report the transfer activity. The transfer mechanisms are only to be used for instances of mass Account transfers. In the event that assets or holdings of a single Account are transferred from one Industry Member to another, it is not required to report this asset transfer to CAT. Refer to [Section 3.3.2](#) for more information.

3.3.1. Automated Transfer Procedure

In the instance the transferring and receiving CAT Reporter Firms requested automated transfer of Account and Customer data, the receiving CAT Reporter Firm must contact the FINRA CAT Helpdesk to provide notification of an upcoming transfer event. A report will be generated by the Plan Processor and provided to the receiving CAT Reporter Firm, detailing any FDIDs of the transferring CAT Reporter Firm that collide with an FDID of the receiving CAT Reporter Firm resulting in a duplicate FDID value, as well as indication of CAT Customers that are present from both the transferring and receiving firms. It is the obligation of the receiving CAT Reporter Firm to ensure any duplicate FDID collisions are resolved in advance of closure of the transfer event.

Following closure of the transfer event, the Plan Processor will create a copy of the FDIDs having no *fdidEndDate* set (or having an *fdidEndDate* set in the future) and associations to Customers present under the transferring CAT Reporter Firm into the CRD of the receiving CAT Reporter Firm. Any new Customer Records that have not previously been submitted by the receiving firm CAT Reporter Firm will also be created by the Plan Processor from the data of the transferring CAT Reporter Firm into the CRD of the receiving CAT Reporter Firm. All FDIDs and Customer associations of the transferring CAT Reporter Firm will then be ended with an *fdidEndReason* of 'TRANSFER' by the Plan Processor on behalf

of the transferring firm as of the date of the transfer event. No submissions by the transferring CAT Reporter Firm CRD will be accepted following the closure of the transfer event.

3.3.2. Transfers enacted in CAIS Data Reporting

In order to enact transfers of Account records from one CAT Reporter Firm to another, the transferring CAT Reporter must report the end of the FDID Record by setting the *fdidEndReason* as 'TRANSFER'.

The receiving CAT Reporter Firm acquiring the Accounts must report in their submission file the FDID their firm has assigned to the Account, the CRD of the transferring CAT Reporter Firm as the *priorCATReporterCRD* value, and must also provide the FDID value assigned to the acquired Account by the transferring CAT Reporter as the *priorCATReporterFDID*.

When using this approach, FDID, LTID, and Customer data of the transferring CAT Reporter Firm will not be moved to the acquiring CAT Reporter Firm by the Plan Processor. It is the obligation of the receiving CAT Reporter Firm to submit all FDID, LTID, and Customer data of the acquired Accounts.

3.4. Translation of Input Identifiers to TID Values

For each Input Identifier that is to be used to uniquely identify a single Customer, the identifier must be input in the exact valid format – that is, 999-99-9999 for SSN or ITIN, and 99-99999999 for EIN – to a SHA-256 hashing algorithm. The 32 bytes output from the SHA-256 hashing algorithm must be then represented as a 64 byte hexadecimal value. This resulting output is the TID value that must be reported to CAT CAIS and will be treated as case-insensitive. It is the responsibility of the CAT Reporter to translate the Input Identifier to a TID. The Plan Processor will conduct validations against the submitted TIDs to ensure the Input Identifier used to generate the TID was in the appropriate format and is from a valid range for the identifier type, as follows:

1. For SSN and ITIN
 - a. No values having an Area Number (first three digits) of 000 nor 666.
 - b. No values having a Group Number (middle two digits) of 00.
 - c. No values having a Serial Number (last four digits) of 0000.
 - d. No values all of the same digit such as 000-00-0000, 111-11-1111, 333-33-3333, 666-66-6666, 999-99-9999, nor 123-45-6789.
2. For EIN
 - a. No range validation will occur for TIDs generated from EINs.
3. For Foreign
 - a. No range validation will occur for TIDs generated from Foreign identifiers.

3.5. Translation of TID to CCID Values

Each valid and unique input TID will result in the generation of a cryptographically randomized CCID generated by the Plan Processor. This resulting CCID will be unique for the specific input TID, and will be the resulting CCID each time the same TID is input for translation. The resulting CCID will not be returned to the CAT Reporter, will not be able to be reversed to the input TID, and is only used within the CAT to uniquely identify a single Customer without storage of Input Identifiers.

3.6. Transition from LTID to Full Customer Reporting

The transition from LTID to Full Customer Reporting includes significant additions to the attributes included on an FDID Record, as well as the addition of Customer-to-FDID associations and Customer Records. In order to reduce concerns of data submitted to CAIS getting out of alignment with data currently stored in a CAT Reporter Firm's systems, CAIS submissions are being changed from a Delta Files with Delta Record Attributes and Associations approach to Delta Files with Full Record Attributes & Associations.

For the LTID phase, it was permissible to exclude optional or conditional attributes previously submitted for an FDID or LTID, and no implicit update was made to these values stored in CAIS. If an Industry Member intended to clear a previously submitted value, they were required to use the paired NULL attribute for the field. Since Industry Members are not permitted to view their record data as currently stored in CAIS, this raised concerns that the data could get out of alignment. To remove that concern in the Full Customer Reporting phase, it is now required to submit the entire FDID Record in its current state with all required LTID and Customer associations for each record within the file. CAT Reporter Firms are still only required to include records in their submission when changes occur, however each record present in the file must contain the current state of attributes and associations of the record.

The sole exception to this inclusion of all current attributes and associations is Customer associations that were previously stored, where the FDID is not included in the current submission but at least one of its associated Customers is included. In this event, the Customer-to-FDID associations for the FDIDs that are not included in the submission file will not be implicitly updated. As an example:

- An initial submission file contains two FDIDs, FDID A and FDID B. FDID A has an association to Customer 1; FDID B has associations to Customer 1 and Customer 2.
- A subsequent submission file contains only FDID B and only contains an association to Customer 2.
- In this event, the association from FDID B to Customer 1 is implicitly ended; however, the association from FDID A to Customer 1 is not implicitly ended because FDID A is not included in the submission file.

3.7. Full Data Replacement Submission

In the event an Industry Member determines it must end all FDID Records submitted to CAT CAIS and would like the Plan Processor to end them on its behalf, it must contact the FINRA CAT Helpdesk.

3.8. Periodic Customer & Account Information Refresh

In accordance with the CAT NMS Plan requirements, it is necessary for CAT Reporter Firms to periodically refresh the Customer and Account information captured in CAIS by re-submitting previously accepted records. Any FDID Record that has no set *fdidEndDate* or has an *fdidEndDate* set to a date greater than the current calendar date must be submitted to, and accepted into, CAIS no less often than every 12 calendar month period. Because the FDID must be submitted with the full current data and its associated CAT Customers, this will also result in refreshing the associated CAT Customer data on the same frequency. If a CAT Reporter Firm submits an FDID prior to the refresh deadline, and it is accepted into CAIS, the 12 calendar month period will be reset from the date of the submission.

Beginning in June 2023, a report, known as the FDID Refresh Report, will be made available on the SFTP, and also within the CAT Reporter Portal – CAIS – no later than 8 a.m. Eastern Time on the third processing date of each month, containing the listing of FDIDs of the CAT Reporter Firm that were last accepted at least 11 calendar months prior to the month of the report. Any FDIDs that are subsequently accepted into CAIS will be removed from the subsequent report and the refresh deadline will be reset for that FDID. If the FDID is not submitted to CAIS, or is submitted to CAIS and is rejected, it will remain on the FDID Refresh Report until such time as it is either ended or is accepted into CAIS successfully. FDIDs that are not refreshed on or earlier than the last day of the 12 calendar month period will be included in the CAIS Report Cards as records overdue for refresh. Report Cards for a given month are generated at the end of the fifth processing day of the following month and published on the 15th calendar day of the following month.

Effective with Full CAIS Release 4 (expected Production date of September 12, 2022):

If an FDID remains open but has had no CAT-reportable activity within the prior six-month period, the Industry Member has the option, but is not obligated to, inactivate it in CAIS by reporting an *fdidEndReason* of 'INACTIVE'. An *fdidEndReason* of 'INACTIVE' indicates the FDID is not in scope for Full Record Refresh requirements, and FDIDs marked as 'INACTIVE' are not required to be updated in CAIS. However, if the inactivated FDID subsequently has any CAT-reportable events reported to the Transaction database, the Industry Member must reactivate the FDID in CAIS by the CAIS reporting deadline. This is accomplished by resubmitting the entire FDID record in its current state (with all required LTID and Customer associations) with null values for the *fdidEndDate* and *fdidEndReason* attributes or by omitting the *fdidEndDate* and *fdidEndReason* attributes from the reactivating submission.

The following are examples of the periodic refresh requirements:

Table 8: Periodic Refresh Examples

FDID Last Accepted	First Included in FDID Refresh Report	Due for FDID Refresh	First Included as Overdue in Report Card for Month Of
July 15, 2022	June 2023	July 31, 2023	July 2023
August 1, 2022	July 2023	August 31, 2023	August 2023
October 31, 2022	September 2023	October 31, 2023	October 2023

3.9. Reporting Multiple Versions of a CAT Customer

In the event that a CAT Reporter Firm has multiple versions of a single CAT Customer, as reconciled to a single Input Identifier and therefore a single *tidValue*, it is permitted to include the versions of the CAT Customer within the same submission files, with differing *customerRecordID* values. The versions of the CAT Customers, however, must not contain differing values for the following fields or else all instances of the CAT Customer within the file will be rejected:

- Reporting a 'FOREIGN' *tidType* record as both Natural Person and Legal Entity Customer Record types
- *yearOfBirth* (Natural Person Customers only)
- *ein* (Legal Entity Customers only)

The data stored in CAIS will consist of the merged set of entries across the submitted versions of the CAT Customer. For example, if the CAT Customer is reported with three different values for the First Name value, each of the name values will be stored in CAIS.

3.10. Tracking of Historical CAT Customer Names

In order to support Regulatory understanding of historical CAT Customer Records, previously reported names of the CAT Customer will be retained in association to the currently submitted state of the record, even when the name value is not included in a subsequent submission of the CAT Customer Record.

3.11. Special Rules Regarding FDID Characters

The following are rules regarding specific handling of characters used to generate FDIDs, following the change to allow a broader set of characters.

- An FDID reported as the value 'PENDING', regardless of case, will be rejected. The value of PENDING is used in CAT Transaction reporting when an FDID is required for the event, but not available at the time of reporting; however, the value is not valid for reporting to CAIS. Once an

FDID has been assigned by the Industry Member, it must be reported to CAIS in the phase in which the Industry Member is required to report to CAIS.

- Inclusion of any of the following character combinations in an FDID will result in rejection of the FDID due to JSON data parsing rules unless the backslash is properly escaped:
 - \b
 - \r
 - \f
 - \n
 - \t
 - \"
- A backslash that is followed by any character other than the ones noted above, will result in the file having an Integrity Error for invalid JSON, unless the backslash is properly escaped.
- As an example of a properly escaped backslash, if an Industry Member has an FDID of '1234\ABCD', they would be required to report this to CAIS as '1234\\ABCD'.
- Leading and trailing spaces in an FDID will be removed during processing, and the string between them will be stored in CAIS. Spaces bounded by other characters within the FDID string will be retained.
- An FDID that consists of only spaces will be rejected.

3.12. Special Rules Regarding Natural Person Customer Names

To facilitate reporting of correct Customer names as required by the CAT NMS Plan, the Technical Specifications require Natural Person first and last names to be reported in two separate fields, *firstName* and *lastName*, respectively. Accordingly, if either the *firstName* or *lastName* fields for Natural Person Customers are not populated, the Customer Record will be rejected.

- In the scenario where an Industry Member has historically maintained the Customer name in an unparsed state and will not be able to complete parsing of all Customer names by July 11, 2022, the Plan Participants will temporarily make available a value of 'UNPARSED' to be populated in the *firstName* field. The unparsed name must be populated in the *lastName* field. Further, as soon as practicable, but no later than January 11, 2023, the Industry Member must resubmit the Customer Record to CAIS with the first and last names parsed and in the required separate *firstName* and *lastName* fields.

Use of the 'UNPARSED' value in the *firstName* field is only allowable until January 11, 2023 (six months after Full CAIS Go-Live) and will be retired from the Full CAIS Technical Specifications effective January 12, 2023.

An “Unparsed Names” Report will be made available to regulators and affected Industry Members.

Please see [FAQ Q58](#) for further information.

- In the scenario where the Customer only has a single legal name (i.e., a first name but no last name, or a last name but no first name):
 - If an Industry Member stores a single name value for its Customer who legally has one name, it must populate the *lastName* field with the name recorded in its books and records and populate the *firstName* field with a value of ‘NNVE’ (No Name Value Exists).
 - If the Industry Member stores the legal name as both the first name and the last name (perhaps, due to system requirements), the Industry Member may report the Customer as described above or may populate the stored values in the respective *firstName* field and *lastName* fields.

3.13. Special Rules Regarding Natural Person Authorized Traders

To facilitate assignment of the unique CCID as required by the CAT NMS Plan, the Technical Specification requires Natural Person CAT Customers to be reported with all required data, including a TID and *yearOfBirth*. Accordingly, if the TID or *yearOfBirth* for a Natural Person CAT Customer are not populated, the Customer Record will be rejected.

In the scenario where an Industry Member has not historically collected and systematized all data required to report a Natural Person Authorized Trader that has authority to trade on an Account, and will not be able to collect and systematize the data by July 11, 2022, the Plan Participants will temporarily make available an Authorized Trader Names List on the FDID record. The Authorized Trader Names List will enable the Industry Member to report only the name of the Natural Person Authorized Trader having authority to trade on the Account, where they do not have all data required to report the Authorized Trader as a Natural Person CAT Customer. Each FDID submitted must still have at least one active association to a CAT Customer reported with a TID and all required data, with trading capabilities.

In the event the Industry Member has stored the name of the Natural Person Authorized Trader as a single string, they are to include the name string as stored in their system. In the event the Industry Member has stored the name of the Natural Person Authorized Trader as multiple fields, they are to report the name as a concatenated string in First/Middle/Last/Suffix order. A single whitespace character must be included between each field value. For example, a name captured as:

- First Name: John

- Middle Name: William
- Last Name: Doe

Must be reported as “John William Doe”.

Further, as soon as practicable, but not later than July 11, 2023, the Industry Member must resubmit the Account to CAIS with all required data for a Natural Person CAT Customer. Use of the Authorized Trader Names List is only allowable until July 11, 2023 (12 months after Full CAIS Go-Live) and will be retired from the Full CAIS Technical Specifications effective July 11, 2023.

4. CAIS Reporting

This section describes the attributes for inclusion within the CAIS submission file. All submissions to CAIS are required to be in UTF-8 encoding. The following table lists each record attribute in JSON naming convention, as well as corresponding Data Types, Include Key, acceptable Occurrences, Description, and Format or Accepted Values for a Choice-type attribute. A single submission to CAIS will require a paired set of a CAIS Data File and a Transformed Identifiers file, as defined in [Section 5.1: File Submissions and Data Formats](#).

4.1. CAIS Data File

The CAIS Data File contains the list of FDID Records and associated data, the core Customer data attributes excluding TID, and the relationships between the two. For security considerations, CAIS Data File must not contain the TID data; this is to be provided in the Transformed Identifiers File. A single CAIS Data File is to be submitted in a pairing with a single Transformed Identifiers File.

Table 9: CAIS Data File

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
<i>version</i>	Text (10)	Main	R	Exactly One per submission file	The <i>version</i> of the CAIS Schema under which the data is reported. The <i>version</i> utilized for full Customer reporting will be 2.0.0.	2.0.0
<i>catReporterCRD</i>	Unsigned	Main	R	Exactly One per submission file	The CRD number assigned to the Industry Member to which the data within the file belongs.	
<i>catSubmitterID</i>	Unsigned	Main	R	Exactly One per submission file	The ID of the CAT Reporting Agent that submitted the file to CAT. In the case the CAT Reporter is submitting data for themselves, they must still populate the CAT Submitter ID field.	
<i>correspondentCRD</i>	Unsigned	Main	C	Zero or One per submission file	The CRD number of the related Introducing Broker or Correspondent firm, if applicable. All FDID and Customer data included in the file will be associated to the <i>catReporterCRD</i> and <i>correspondentCRD</i> pairing.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
<i>fdidRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of <i>firmDesignatedID</i> attribute occurrences within the file. Used to validate the count of FDID Records intended to be submitted within the file matches the count of records present in the file.	
<i>naturalPersonCustomerRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of <i>customerRecordID</i> attribute occurrences within the file for Natural Person type Customers. Used to validate the count of Natural Person Customer Records intended to be submitted within the file matches the count of records present in the file.	
<i>legalEntityCustomerRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of <i>customerRecordID</i> attribute occurrences within the file for Legal Entity type Customers. Used to validate the count of Legal Entity Customer Records intended to be submitted within the file matches the count of records present in the file.	
<i>fdidRecordList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of FDID Records that are included in the file. Required if the submission file contains one or more FDID Records; not required if no FDID Records are included in the file.	
<i>fdidRecordID</i>	Unsigned	FDID Record	R	Exactly One per FDID Record	A unique reference to a single FDID for a single submission file.	
<i>firmDesignatedID</i>	Text (40)	FDID Record	R	Exactly One per FDID Record	The Firm Designated ID of the 'ACCOUNT', 'RELATIONSHIP', or 'ENTITYID' being reported by the CAT Reporting firm.	
<i>fdidType</i>	Choice	FDID Record	R	Exactly One per FDID Record	Representation of the type of record of the reported FDID. Values: ACCOUNT – Account type record. RELATIONSHIP – Relationship type record. ENTITYID – Entity ID type record. Only allowable	"ACCOUNT" "RELATIONSHIP" "ENTITYID"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts.	
<i>accountType</i>	Array [Choice]	FDID Record	R	Exactly One per FDID Record	<p>Representation of the type or types of Account the FDID represents. All applicable values for the FDID must be included in the array.</p> <p>Values:</p> <p>AVERAGE – Industry Member-owned average price account.</p> <p>DVP/RVP – Delivery versus Payment account/Receipt versus Payment account.</p> <p>EDUCATION – Established for education savings including 529 Plan or Coverdale ESA.</p> <p>ENTITYID – Entity ID type record. Only allowable when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts.</p> <p>ERROR – Error account.</p> <p>FIRM – Is owned by the reporting firm, including proprietary trading accounts and inventory accounts.</p> <p>INSTITUTION – An institutional Account as defined in FINRA Rule 4512(c).</p> <p>MARKET – Market Making Account.</p> <p>MARGIN – Approved for trading on Margin.</p> <p>OPTION – Approved for trading Options.</p> <p>OTHER – Account which does not meet the criteria for any other listed value.</p> <p>RELATIONSHIP – Relationship type record.</p> <p>RETIREMENT – As defined by the IRS:</p> <ul style="list-style-type: none"> • Individual Retirement Arrangements (IRAs) • Roth IRAs 	<p>“AVERAGE”</p> <p>“DVP/RVP”</p> <p>“EDUCATION”</p> <p>“ENTITYID”</p> <p>“ERROR”</p> <p>“FIRM”</p> <p>“INSTITUTION”</p> <p>“MARKET”</p> <p>“MARGIN”</p> <p>“OPTION”</p> <p>“OTHER”</p> <p>“RELATIONSHIP”</p> <p>”</p> <p>“RETIREMENT”</p> <p>“UGMA/UTMA”</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					<ul style="list-style-type: none"> • 401(k) Plans • 403(b) Plans • SIMPLE IRA Plans (Savings Incentive Match Plans for Employees) • SEP Plans (Simplified Employee Pension) • SARSEP Plans (Salary Reduction Simplified Employee Pension) • Payroll Deduction IRAs • Profit-Sharing Plans • Defined Benefit Plans • Money Purchase Plans • Employee Stock Ownership Plans (ESOPs) • Governmental Plans • 457 Plans UGMA/UTMA – Established as a custodial account under the Uniform Gift to Minors Act or Uniform Transfer to Minors Act.	
<i>accountName</i>	Extended Text (200)	FDID Record	R	Exactly One per FDID Record	The name applied to the 'ACCOUNT', 'RELATIONSHIP', or 'ENTITYID' at the CAT Reporter Firm.	
<i>DVPCustodianID</i>	Array [Alphanumeric (5)]	FDID Record	C	Zero or One per FDID Record	Required when <i>accountType</i> includes 'DVP/RVP'. If the custodian is a US broker-dealer, this field must be populated with the clearing number of the custodian. If the custodian is a bank and is not a registered broker-dealer, this field must be populated with the DTC number of the bank. If there is no clearing number or DTC number, this field must be populated with a value of 'FOR'.	
<i>clearingBrokerID</i>	Array [Alphanumeric (4)]	FDID Record	C	Zero or One per FDID Record	The NSCC Clearing ID of the Industry Member that clears the Accounts. Must be populated if known to the CAT Reporter firm. All values included in the array must be separated by commas. Each value must be exactly four characters, including leading zeros. If the CAT Reporter firm is a self-clearing firm, they must report their own NSCC	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Clearing ID.	
<i>branchOfficeCRD</i>	Unsigned	FDID Record	C	Zero or One per FDID Record	The CRD for the Branch Office to which the FDID Record is assigned if applicable. Required if a Customer Account is assigned to a branch office other than the main office.	
<i>registeredRepCRD</i>	Array [Unsigned]	FDID Record	O	Zero or One per FDID Record	The Central Registration Depository ID assigned to the Registered Representative(s) responsible for the FDID Record (as identified as such per SEC Rule 17a-3) that can provide trading advice for the Account. When optionally reported, all CRDs included in the array must be only numeric values, must not contain any leading zeroes, and must be separated by commas.	
<i>fdidDate</i>	Date (Number) (8)	FDID Record	R	Exactly One per FDID Record	Date on which the FDID Account opened, as defined in Section 2.2.3 of this specification, in YYYYMMDD format.	YYYYMMDD
<i>fdidEndDate</i>	Date (Number) (8)	FDID Record	C	Zero or One per FDID Record	Date on which the Account was closed or the Relationship was ended, in YYYYMMDD format. Must be provided if the <i>fdidEndReason</i> field is populated.	YYYYMMDD
<i>fdidEndReason</i>	Choice	FDID Record	C	Zero or One per FDID Record	Reason why the Account was closed or the Relationship was ended. Must be provided if the <i>fdidEndDate</i> field is populated. Values: CORRECTION – FDID was erroneously reported. ENDED – FDID was ended (e.g., account was closed). INACTIVE – Indicates the FDID has had no CAT-reportable transaction activity associated with the FDID in the prior six months. REPLACED – FDID replaced by another FDID within the CAT Reporter	“CORRECTION” “ENDED” “INACTIVE” “REPLACED” “OTHER” “TRANSFER”

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Firm. See FAQ M16 regarding FDID replacements. OTHER – Other unlisted reason for ending the FDID. TRANSFER - FDID was transferred to another CAT Reporter Firm.	
<i>replacedByFDID</i>	Text (40)	FDID Record	C	Zero or One per FDID Record	The new FDID replacing the currently reported FDID, used to provide historical linkage across replaced records over time. Must be provided if the <i>fdidEndReason</i> is 'REPLACED'. Must not be provided if the <i>fdidEndReason</i> is any value other than 'REPLACED'.	
<i>priorCATReporterCRD</i>	Unsigned	FDID Record	C	Zero or One per FDID Record	CRD of the CAT Reporter firm from which the FDID was acquired. Must be provided if FDID was acquired by the CAT Reporter. Must be provided if <i>priorCATReporterFDID</i> is populated.	
<i>priorCATReporterFDID</i>	Text (40)	FDID Record	C	Zero or One per FDID Record	The original FDID for the record acquired by the current CAT Reporter firm. Must be provided if FDID was acquired by the CAT Reporter.	
<i>addressList</i>	Multi-Dimensional Array	FDID Record	R	Exactly One per FDID Record	Structure for the array of Address records that are associated to the FDID Record within the file. At a minimum, an 'ADDRESS1' record populated with the mailing address associated to the FDID must be included for each FDID Record within the file. Additional addresses may be included for the FDID if available within the CAT Reporter Firm's system.	
<i>addrType</i>	Choice	Address Record	R	Exactly One per Address Record	The type of the Address record. Values: ADDRESS1 – The mailing address record of the FDID. ADDRESS2 – The second address record of the FDID. ADDRESS3 – The third address record of the FDID. ADDRESS4 – The fourth	"ADDRESS1" "ADDRESS2" "ADDRESS3" "ADDRESS4"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					address record of the FDID.	
<i>addrLine1</i>	Extended Text (40)	Address Record	R	Exactly One per Address Record	The first Address Line for the Address record.	
<i>addrLine2</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line.	
<i>addrLine3</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> is not provided.	
<i>addrLine4</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> and <i>addrLine3</i> are not provided.	
<i>city</i>	Extended Text (100)	Address Record	R	Exactly One per Address Record	City of the Address.	
<i>regionCode</i>	Extended Text (40)	Address Record	C	Zero or One per Address Record	Code of the local region of the Address. Must be provided if known to the CAT Reporter. Must be provided in ISO 3166-2 format if the region list is available in Appendix E for the Country of the Address (i.e., United States and Canada). If the region for the Country of the Address is not available in Appendix E, it is not required to be reported in ISO 3166-2 format.	AA-XX* *Format when <i>countryCode</i> is 'US' or 'CA'
<i>countryCode</i>	Choice	Address Record	R	Exactly One per Address Record	Code of the Country of the Address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
<i>postalCode</i>	Text (15)	Address Record	C	Zero or One per Address Record	Postal Code of the Address. Must be provided if Postal Codes exist for the Country of the Address. Please view Appendix E for acceptable formatting per Country.	
<i>largeTraderList</i>	Multi-Dimensional Array	FDID Record	C	Zero or One per FDID Record	Structure for the array of LTID and ULTID Records that are associated to the FDID Record within the file. Required if the submission file contains one or more LTID/ULTID Records associated to the FDID Record; not required if no LTID/ULTID Records are included in the file in	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					association to the reported FDID.	
<i>largeTraderRecordID</i>	Unsigned	Large Trader Record	R	Exactly One per Large Trader Record	A unique reference to a single LTID or ULTID in reference to a single FDID for a single submission file.	
<i>largeTraderID</i>	Text (13)	Large Trader Record	R	Exactly One per Large Trader Record	The LTID or ULTID associated to the FDID in the CAT Reporter's system. For LTID Records, the identifier must be eight numeric characters, followed by a dash, followed by four numeric characters. For ULTID Records, the identifier must start with 'ULT', followed by alphanumeric [0-9A-Z] characters for the fifth through eighth positions, followed by a dash, followed by four alphanumeric [0-9A-Z] characters.	For LTID – 99999999-9999 For ULTID – ULTXXXXX-XXXX
<i>ltidEffectiveDate</i>	Date (Number) (8)	Large Trader Record	R	Exactly One per Large Trader Record	Date on which the LTID or ULTID became associated to the FDID within the CAT Reporter's system, in YYYYMMDD format.	YYYYMMDD
<i>ltidEndDate</i>	Date (Number) (8)	Large Trader Record	C	Zero or One per Large Trader Record	Date on which the LTID or ULTID was no longer associated to the FDID within the CAT Reporter's system, in YYYYMMDD format. Must be provided if the <i>ltidEndReason</i> field is populated.	YYYYMMDD
<i>ltidEndReason</i>	Choice	Large Trader Record	C	Zero or One per Large Trader Record	Reason why the LTID or ULTID was no longer associated to the FDID. Must be populated in order to end date an LTID-to-FDID association in the system. Must be provided if the <i>ltidEndDate</i> field is populated. Values: CORRECTION – LTID was erroneously reported. ENDED – LTID-to-FDID association was ended. INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the prior six months.	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					<p>REPLACED – LTID was replaced by a different LTID or the FDID was replaced by a different FDID.</p> <p>OTHER – Other unlisted reason for ending the LTID-to-FDID association.</p> <p>TRANSFER – LTID association was ended because the FDID was transferred to another Industry Member.</p>	
<i>fdidCustomerList</i>	Multi-Dimensional Array	FDID Record	C	Exactly One per FDID Record	Structure for the array of Customer Records that are associated to the FDID Record within the file. Required when the FDID is being reported to CAIS for the first time, and also required when the FDID is not being ended.	
<i>customerRecordID</i>	Unsigned	FDID Customer Record	R	Exactly One per FDID Customer Record	A unique reference to a single Customer for a single submission file.	
<i>role</i>	Choice	FDID Customer Record	R	Exactly One per FDID Customer Record	<p>Representation of the type of <i>role</i> the Customer has on the FDID.</p> <p>Values:</p> <p>AUTH3RD – An Authorized Trader who is not a holder of the Account, nor an employee of the reporting Industry Member, who has authority to place orders for the Account without prior approval of the account holder(s).</p> <p>AUTHREP – An Authorized Trader who is not a holder of the Account but does have authority to place orders for the Account without prior approval of the account holder(s) and is either the reporting Industry Member or an employee of the reporting Industry Member, if the account holder specifically designates the natural person employee as authorized to trade for the Account independent of the authority granted to the entity Authorized Trader. See FAQ Q56 for more</p>	<p>“AUTH3RD”</p> <p>“AUTHREP”</p> <p>“NTHOLDER”</p> <p>“TRDHOLDER”</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					information. NTHOLDER – Holder of the Account that does not have authorization to trade on the Account. TRDHOLDER – Holder of the Account that also has authorization to trade on the Account.	
<i>hasDiscretion</i>	Boolean	FDID Customer Record	C	Zero or One per FDID Customer Record	Indicates if the Authorized Trader has the ability to place orders on the Account without prior approval of the Holder(s). Not to be provided as 'true' if <i>role</i> is 'NTHOLDER' or 'TRDHOLDER'.	true false
<i>roleStartDate</i>	Date (Number) (8)	FDID Customer Record	R	Exactly One per FDID Customer Record	Date on which the Customer entered into the specified <i>role</i> on the Account, in YYYYMMDD format.	YYYYMMDD
<i>roleEndDate</i>	Date (Number) (8)	FDID Customer Record	C	Zero or One per FDID Customer Record	Date on which the Customer ceased having the specified <i>role</i> on the FDID, in YYYYMMDD format. <i>Must be provided if the roleEndReason field is populated.</i>	YYYYMMDD
<i>roleEndReason</i>	Choice	FDID Customer Record	C	Zero or One per FDID Customer Record	Reason why the Customer ceased having the specified <i>role</i> on the FDID. <i>Must be provided if the roleEndDate field is populated.</i> Values: CORRECTION – Customer role on FDID was erroneously reported or FDID was erroneously reported. ENDED – Customer role on FDID was ended or FDID was ended (e.g., account was closed upon death of account holder). INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the prior six months. REPLACED – Customer role on FDID was ended because the FDID was replaced with another FDID, or because the Customer Input Identifier was	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					replaced with another Input Identifier. OTHER – Other unlisted reason for ending the Customer role on FDID. TRANSFER – Role ended because the FDID was transferred to another Industry Member.	
<i>authTraderNamesList</i>	Multi-Dimensional Array	FDID Record	C	Zero or One per FDID Customer Record	Structure for the array of Authorized Trader Names that are associated to the FDID record within the file. Must only be used for Natural Person Authorized Traders where the Industry Member does not have all data required to report a full Natural Person CAT Customer record. Required if the FDID has one or more Authorized Trader Names; not required if the FDID does not have any Authorized Trader Names.	
<i>authTraderNameID</i>	Unsigned	Authorized Trader Name List	R	Exactly One per Authorized Trader Name Record	A unique reference to a single Authorized Trader Name for a single FDID, for a single submission file.	
<i>authTraderName</i>	Extended Text (200)	Authorized Trader Name List	R	Exactly One per Authorized Trader Name Record	The name of the Natural Person who has authority to place order for the account.	
<i>naturalPersonCustomerList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of Natural Person type Customer Records that are included in the file. Required if the submission file contains one or more Natural Person Customer Records; not required if no Natural Person Customer Records are included in the file.	
<i>customerRecordID</i>	Unsigned	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	A unique reference to a single Customer for a single submission file.	
<i>firstName</i>	Extended Text (40)	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	The First Name known for the Customer. If the Customer legally has one name, this field must be populated with 'NNVE' (No	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Name Value Exists).	
<i>middleName</i>	Extended Text (20)	Natural Person Customer Record	O	Zero or One per Natural Person Customer Record	The Middle Name or initial known for the Customer.	
<i>lastName</i>	Extended Text (200)	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	The Last Name known for the Customer.	
<i>nameSuffix</i>	Choice	Natural Person Customer Record	O	Zero or One per Natural Person Customer Record	The Name Suffix known for the Customer. Values: FIFTH FOURTH JUNIOR SENIOR THIRD	"FIFTH" "FOURTH" "JUNIOR" "SENIOR" "THIRD"
<i>doingBusinessAs</i>	Extended Text (200)	Natural Person Customer Record	C	Zero or One per Natural Person Customer Record	The Doing Business As name for a sole proprietorship or other legal entity Customer reported to CAIS using 'SSN/ITIN' as the Input Identifier. Must be populated when reporting a CAT Customer as a Natural Person record that is a sole proprietorship, trust, or otherwise conducts business under a name other than the Natural Person's legal name.	
<i>yearOfBirth</i>	Year (Number) (4)	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	The Year of Birth known for the Customer in YYYY format.	YYYY
<i>addressList</i>	Multi-Dimensional Array	Natural Person Customer Record	C	Zero or One per Natural Person Customer Record	Structure for the array of Address records that are associated to the Customer Record within the file. If the <i>addressList</i> is included, an 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the CAT Reporter Firm's system.	
<i>addrType</i>	Choice	Addresses Record	R	Exactly One per Address Record	The type of the Address record. Values: ADDRESS1 – The first	"ADDRESS1" "ADDRESS2" "ADDRESS3"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					address record of the Customer. ADDRESS2 – The second address record of the Customer. ADDRESS3 – The third address record of the Customer. ADDRESS4 – The fourth address record of the Customer.	"ADDRESS4"
<i>addrLine1</i>	Extended Text (40)	Address Record	R	Exactly One per Address Record	The first Address Line for the address.	
<i>addrLine2</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line.	
<i>addrLine3</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> is not provided.	
<i>addrLine4</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> and <i>addrLine3</i> are not provided.	
<i>city</i>	Extended Text (100)	Address Record	R	Exactly One per Address Record	City of the Address.	
<i>regionCode</i>	Extended Text (40)	Address Record	C	Zero or One per Address Record	Code of the local region of the Address. Must be provided if known to the CAT Reporter. Must be provided in ISO 3166-2 format if the region list is available in Appendix E for the Country of the Address (i.e., United States and Canada). If the region for the Country of the Address is not available in Appendix E, it is not required to be reported in ISO 3166-2 format.	AA-XX* *Format when <i>countryCode</i> is 'US' or 'CA'
<i>countryCode</i>	Choice	Address Record	R	Exactly One per Address Record	Code of the Country of the Address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
<i>postalCode</i>	Text (15)	Address Record	C	Zero or One per Address Record	Postal Code of the Address. Must be provided if known to the CAT Reporter. Please view Appendix E for acceptable formatting per Country.	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
<i>customerType</i>	Array [Choice]	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	<p>Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in the array.</p> <p>Values:</p> <p>ACCREDITED – Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the Industry Member’s general customer and account records.</p> <p>ADVISER – Customer was identified as being associated to a US registered Investment Adviser, if the fact that the Customer is associated with a US registered Investment Adviser is maintained as an attribute in the Industry Member’s general customer and account records.</p> <p>CP – Customer identified itself as an officer, director, or 10% or more share owner of a public company at the time of account opening.</p> <p>EMPLOYEE –Customer is an employee or associated person of the CAT Reporter, as defined in Section 3(a)(18) of the Securities Exchange Act of 1934. If employee attribute is maintained by the CAT Reporter at the group level, this value may also include Customers employed by affiliated group companies.</p> <p>FOREIGN – Customer is a Natural Person or Legal Entity that does not have a US Tax Identifier.</p> <p>NOTAPPLICABLE – None of the defined terms are applicable to the Customer.</p> <p>OTHBKR – Customer is associated with a US registered Broker-Dealer other than the Industry Member.</p> <p>TRUST – Customer is a</p>	<p>“ACCREDITED”</p> <p>“ADVISER”</p> <p>“CP”</p> <p>“EMPLOYEE”</p> <p>“FOREIGN”</p> <p>“NOTAPPLICABLE”</p> <p>“OTHBKR”</p> <p>“TRUST”</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Trust.	
<i>updateNotification</i>	Boolean	Natural Person Customer Record	C	Zero or One per Natural Person Customer Record	Indicates the Customer Record is being reported to close a Material Inconsistency, or is being reported with known updates to key attributes including: Year of Birth. If populated as true, changes to the key attributes will not result in a Material Inconsistency.	true false
<i>legalEntityCustomerList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of Legal Entity type Customer Records that are included in the file. Required if the submission file contains one or more Legal Entity Customer Records; not required if no Legal Entity Customer Records are included in the file.	
<i>customerRecordID</i>	Unsigned	Legal Entity Customer Record	R	Exactly One per Legal Entity Customer Record	A unique reference to a single Customer for a single submission file.	
<i>legalName</i>	Extended Text (200)	Legal Entity Customer Record	R	Exactly One per Legal Entity Customer Record	The Legal Name known for the Customer entity.	
<i>addressList</i>	Multi-Dimensional Array	Legal Entity Customer Record	C	Zero or One per Legal Entity Customer Record	Structure for the array of Address records that are associated to the Customer Record within the file. If the <i>addressList</i> is included, an 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the CAT Reporter Firm's system.	
<i>addrType</i>	Choice	Address Record	R	Exactly One per Address Record	The type of the Address record. Values: ADDRESS1 – The first address record of the Customer. ADDRESS2 – The second address record of the Customer. ADDRESS3 – The third address record of the Customer.	"ADDRESS1" "ADDRESS2" "ADDRESS3" "ADDRESS4"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					ADDRESS4 – The fourth address record of the Customer.	
<i>addrLine1</i>	Extended Text (40)	Address Record	R	Exactly One per Address Record	The first Address Line for the address.	
<i>addrLine2</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line.	
<i>addrLine3</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> is not provided.	
<i>addrLine4</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> and <i>addrLine3</i> are not provided.	
<i>city</i>	Extended Text (100)	Address Record	R	Exactly One per Address Record	City of the Address.	
<i>regionCode</i>	Extended Text (40)	Address Record	C	Zero or One per Address Record	Code of the local region of the Address. Must be provided if known to the CAT Reporter. Must be provided in ISO 3166-2 format if the region list is available in Appendix E for the Country of the Address (i.e., United States and Canada). If the region for the Country of the Address is not available in Appendix E, it is not required to be reported in ISO 3166-2 format.	AA-XX* *Format when <i>countryCode</i> is 'US' or 'CA'
<i>countryCode</i>	Choice	Address Record	R	Exactly One per Address Record	Code of the Country of the Address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
<i>postalCode</i>	Text (15)	Address Record	C	Zero or One per Address Record	Postal Code of the Address. Must be provided if known to the CAT Reporter. Please view the reference data list for acceptable formatting per Country.	
<i>ein</i>	Text (10)	Legal Entity Customer Record	C	Zero or One per Legal Entity Customer Record	The Employer Identification Number (EIN) of the Customer, in 99-9999999 format. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was an EIN.	99-9999999

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
<i>customerType</i>	Array [Choice]	Legal Entity Customer	R	Exactly One per Legal Entity Customer Record	Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in the array. Values: ACCREDITED – Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the Industry Member’s general customer and account records. ADVISER – Customer was identified as a US registered Investment Adviser, if the fact that the Customer is a US registered Investment Adviser is maintained as an attribute in the Industry Member’s general customer and account records. BD – Customer is a US registered Broker/Dealer. FOREIGN – Customer is a Natural Person or Legal Entity that does not have a US Tax Identifier. NOTAPPLICABLE – None of the defined terms are applicable to the Customer. RIC – Customer is a Registered Investment Company, as defined in the Investment Company Act of 1940 (15 U.S.C. § 80a–3(a)(1)). TRUST – Customer is a Trust.	“ACCREDITED” “ADVISER” “BD” “FOREIGN” “NOTAPPLICABLE” “RIC” “TRUST”
<i>lei</i>	Alphanumeric (20)	Legal Entity Customer Record	C	Zero or One per Legal Entity Customer Record	The Legal Entity Identifier (LEI) of the Customer. Must be provided if known to the Industry Member. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was an LEI.	
<i>updateNotification</i>	Boolean	Legal Entity	C	Zero or One per Legal	Indicates the Customer Record is being reported to	true false

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		Customer Record		Entity Customer Record	close a Material Inconsistency, or is being reported with known updates to key attributes. If populated as true, changes to the key attributes will not result in a Material Inconsistency. Updates to the EIN included on a Legal Entity Customer Record will always result in a Material Inconsistency because if an EIN is available for the Customer, the EIN is to be used to create the TID for the submission and a differing EIN must result in a different TID.	
<i>correctionList</i>	Multi-Dimensional Array	Main	C	Zero or One per Submission File	Structure for the array of Correction records within the file. Required if the submission file contains one or more Correction records. Must only be used for correcting rejections caused by a malformed <i>firmDesignatedID</i> or TID value.	
<i>rejectionID</i>	Unsigned	Correction Record	R	Exactly One per Correction Record	The <i>rejectionID</i> from a prior submission that was created for the particular Data Ingestion error being corrected.	
<i>correctionAction</i>	Choice	Correction Record	R	Exactly One per Correction Record	The particular action that is being taken to correct for the prior rejection. Values: CORRECTION – A new entry is included in the submission file to correct for the prior rejected record using a new <i>firmDesignatedID</i> or new Customer Record. DELETE – The prior rejection needs to be cleared without a new record being submitted.	“CORRECTION” “DELETE”
<i>correctingFirmDesignatedID</i>	Text (40)	Correction Record	C	Zero or One per Correction Record	The <i>firmDesignatedID</i> that is correcting for the prior rejected FDID. The <i>correctingFirmDesignatedID</i> must be present in the submission file, or have been accepted in a prior CAT CAIS submission. Required if the <i>correctionAction</i> is	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					'CORRECTION' and the prior error being corrected was against an FDID.	
<i>correctingCustomerRecordID</i>	Unsigned	Correction Record	C	Zero or One per Correction Record	The <i>correctingCustomerRecordID</i> that is correcting for the prior rejected <i>customerRecordID</i> record. The <i>correctingCustomerRecordID</i> must be present in the submission file. Required if the <i>correctionAction</i> is 'CORRECTION' and the prior error being corrected was against a Customer.	

4.2. Transformed Identifiers File

The Transformed Identifiers File contains the list of TID values and the pointer to the *customerRecordID* from the CAIS Data File. A single Transformed Identifiers File is to be submitted in a pairing with a single CAIS Data File containing one or more Customer Records.

Table 10: Transformed Identifiers File

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
<i>version</i>	Text (10)	Main	R	Exactly One per submission file	The version of the Transformed Identifiers Schema under which the data is reported. Initial version utilized will be 2.0.0	2.0.0
<i>tidRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of TID attribute occurrences within the file. Used to validate the count of TID records intended to be submitted within the file matches the count of records present in the file.	
<i>tidRecordList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of TID Records that are included in the file. Required if the submission file contains one or	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					more TID records; not required if no TID records are included in the file.	
<i>customerRecordID</i>	Unsigned	TID Record	R	Exactly One per TID Record	A unique reference to a single Customer Record in the CAIS data file.	
<i>tidType</i>	Choice	TID Record	R	Exactly One per TID record	The specific type of Input Identifier used to generate the TID value. Values: EIN – Indicates the TID was generated using an Employer Identification Number (EIN). FOREIGN – Indicates an identifier other than an EIN, SSN, or ITIN was used to generate the TID. SSN/ITIN – Indicates the TID was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).	“EIN” “FOREIGN” “SSN/ITIN”
<i>foreignTIDType</i>	Choice	TID Record	C	Zero or One per TID Record	The type of Foreign Input Identifier used to generate a ‘FOREIGN’ type TID. Required to be populated if the <i>tidType</i> is ‘FOREIGN’. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer: Values: 1. NATIONALID – National Registration or Tax Identifier, if the CAT Reporter knows the identifier was issued by a national-level government body or agency, or when the CAT Reporter	“DRIVERLICENS E” “LEI” “NATIONALID” “OTHGOVT” “PASSPORT” “PERMANENT”

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					cannot distinguish if the issuer is a national-level government body or agency. 2. LEI – Legal Entity Identifier. 3. PASSPORT – Country of Issuance and Passport Number. 4. PERMANENT – Permanent Resident Identifier. 5. DRIVERLICENSE – Driver’s License identifier. 6. OTHGOVT – Other Government-Issued Identifier, if the CAT Reporter knows the identifier was issued by a non-national level government body or agency, such as a regional agency. Must not be used if one of the other allowable values apply.	
<i>foreignTIDCountryCd</i>	Choice	TID	C	Zero or One per TID Record	Code of the Country that issued the Input Identifier used to generate the ‘FOREIGN’ type Transformed Identifier, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values. Required if the <i>tidType</i> is ‘FOREIGN’ and the <i>foreignTIDType</i> is not ‘LEI’.	AA
<i>tidValue</i>	Hexadecimal (64)	TID Record	R	Exactly One per TID Record	The obfuscated TID value created in place of the Input Identifier of the Customer Record whose data is being reported.	
<i>replacedByTIDType</i>	Choice	TID Record	C	Zero or One per TID Record	The type of obfuscated TID value created in place of the Input Identifier of the	“EIN” “FOREIGN” “SSN/ITIN”

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					<p>Customer Record that has taken the place of the reported Customer Record.</p> <p>Values:</p> <p>EIN – Indicates the <i>replacedByTID</i> was generated using an Employer Identification Number (EIN).</p> <p>FOREIGN – Indicates an identifier other than an EIN, SSN, or ITIN was used to generate the <i>replacedByTID</i>.</p> <p>SSN/ITIN – Indicates the <i>replacedByTID</i> was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).</p>	
<i>replacingForeignTIDType</i>	Choice	TID Record	C	Zero or One per TID Record	<p>The type of Foreign Input Identifier used to generate a 'FOREIGN' type TID that has taken the place of the reported Customer Record. Required to be populated if the <i>replacedByTIDType</i> is 'FOREIGN'. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer:</p> <p>Values:</p> <p>1. NATIONALID – National Registration or Tax Identifier, if the CAT Reporter knows the identifier was issued by a national-level government body or agency, or when the CAT Reporter cannot distinguish if the issuer is a national-level government body or</p>	<p>"DRIVERLICENSE"</p> <p>"LEI"</p> <p>"NATIONALID"</p> <p>"OTHGOVT"</p> <p>"PASSPORT"</p> <p>"PERMANENT"</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					<p>agency.</p> <p>2. LEI – Legal Entity Identifier.</p> <p>3. PASSPORT – Country of Issuance and Passport Number.</p> <p>4. PERMANENT – Permanent Resident Identifier.</p> <p>5. DRIVERLICENSE – Driver’s License identifier.</p> <p>6. OTHGOVT – Other Government-Issued Identifier, if the CAT Reporter knows the identifier was issued by a non-national level government body or agency such as a regional agency. Must not be used if one of the other allowable values apply.</p>	
<i>replacingForeignTIDCountryCd</i>	Choice	TID	C	Zero or One per TID Record	Code of the Country that issued the Input Identifier used to generate the ‘FOREIGN’ type Transformed Identifier that has taken the place of the reported Customer Record., in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values. Required if the <i>replacedByTIDType</i> is ‘FOREIGN’ and the <i>replacingForeignTIDType</i> is not ‘LEI’.	AA
<i>replacedByTID</i>	Hexadecimal (64)	TID Record	C	Zero or One per TID Record	The obfuscated TID value created in place of the SSN, ITIN, EIN, or Foreign identifier of the Customer Record that has taken the place of the reported Customer Record. Must only be used when there has been a change in a	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					CAT Customer's Input Identifier, resulting in a new TID value. Must not be used when ending a CAT Customer Record which was reported with an erroneous Input Identifier.	

5. Submission Process

This section contains information pertaining to CAT CAIS Account data and file formats, CAT CAIS submissions (including a general data flow overview), network and transport options, CAT CAIS access, and reporting hours.

5.1. File Submissions and Data Formats

CAT CAIS Customer and Account reference data submissions must include a data file with populated header record information, including Version, CAT Reporter ID, CAT Submitter ID, FDID Record Count, and Customer Record Count. It is valid and acceptable for an Industry Member to submit a file with only this header information and record counts of zero, indicating an intentional submission of no Account or Customer Record data.

All submissions to CAIS are required to be in UTF-8 encoding. The following are examples of input UTF-8 values and their corresponding expected SHA-256 hashes:

Input Value	Hashed Value
999-99-9999	1438887c12c566c8f87325380e06517bfb2e46e4de7e07fc6f004ea5bb21945d
111-11-1111	4628ea314743d5ac373997763be3d39b86fc40c5d2015d2db345b0231e215b6c
000-00-0000	5fb0d784eb4b5277d787d9fef634cde3f1915fe4ae306d4a4c41db866565e7bd

A single submission to CAT CAIS must be comprised of a paired data file and identifiers file, even if record counts are zero for both files. The base file names for the data file and identifiers file must use identical name values, comprised of the CAT Submitter ID, CAT Reporter CRD, File Generation Date, optional Group, and File Number, to be identified as a paired data file. Data files have a prescribed naming convention and are supported in JSON format. It is acceptable to submit a file set containing zero records, for example if an Industry Member has no updates to report but chooses to continuously generate and submit a daily file.

Transformed Identifiers data submissions must include a data file with populated header information, including Version and TID Record Count. It is valid and acceptable for an Industry Member to submit a file with only this header information and record counts of zero, indicating an intentional submission of no TID data.

5.1.1. File Submission Names

1. Reference Data files must be named using the following format:

<CAT Submitter ID>_<CAT Reporter CRD>_<File Generation Date>_[<Group>_]<File Kind>_<File Number>.<Format Extension>.<Compression Extension>

For example: 123_999_20200101_CAIS_000123.json.bz2

2. Identifier files must be named using the following format:

<CAT Submitter ID>_<CAT Reporter CRD>_<File Generation Date>_[<Group>_]<File Kind>_<File Number>.<Format Extension>.<Compression Extension>

For example: 123_999_20200101_TIDS_000123.json.bz2

3. The values assigned within the format of a file name include:

Table 11: Elements of a File Submission Name

Field Name	Data Type	Description	Include Key
CAT Submitter ID	Unsigned	CAT Reporting Agent that submitted the file to CAT.	R
CAT Reporter CRD	Unsigned	The CRD assigned identifier of the Industry Member to which the data within the file belongs.	R
File Generation Date	Date	The date the file was generated or reported. Used to guarantee uniqueness of a file across dates. Date must be less than or equal to System Date. Future dates are not acceptable.	R
Group	Alphanumeric (20)	CAT Reporter defined string to guarantee uniqueness of a file across dates. File names associated with web submission directly entered into the CAIS Reporter Portal will be assigned the value of 'caisweb'. Submission files uploaded via the CAIS Reporter Portal or submitted via SFTP must not use a value of 'caisweb' for the Group field.	O
File Kind	Alphanumeric (20)	Set to 'CAIS' for Reference Data files. Set to 'TIDS' for Identifiers files.	R
File Number	Unsigned	Sequence number of the file, 6-digits long, left-padded with zeros.	R
Format Extension	Alphanumeric (4)	Represents the format of the data submission. JSON formatted submissions must be 'json'.	R
Compression Extension	Alphanumeric (3)	Applicable to Data Files. Set to 'bz2'	R

4. File names are required to be globally unique among all other files using the base name (the portion of the file name without the format and compression extensions) of the file.

5. A single CAT CAIS submission must consist of a paired Data file and Identifiers file, noted by the same file name for the Data file and Identifiers file for the combination of CAT Submitter ID, CAT Reporter CRD, File Generation Date, optional Group (if present on either), and File Number attributes.

5.1.2. Submission Formats

CAT CAIS supports the submission of data in JSON format only, due to the relational nature of the Account and Customer data.

5.1.3. Reference Data File Submission

The following rules apply to Reference Data Files:

1. The CAT CAIS Processor will support standard JSON syntax for each record or as specified in this document.
2. Data files serve as top-level containers for each object.
3. All data files sent from the CAT Reporter (or the third-party CAT Reporting Agent for the CAT Reporter) must be compressed using BZip2. The associated compression extension is “bz2”.
4. Data files must be individually compressed and submitted. Compressed files may not be bundled into a single container file.
5. The data contained within the data file must represent data for the CAT Reporter CRD number identified within the file name.
6. A Data file without an associated Identifiers file posted within 60 minutes of the data file submission will result in an error.
7. An Identifiers file without an associated Data file posted within 60 minutes of the Identifiers file submission will result in an error.
8. The CAT Submitter ID, CAT Reporter CRD, File Generation Date, optional Group, and File Number must be the same for the Reference Data file and paired Identifiers file.
9. The Reference Data File submission must be the same schema *version* as the Identifiers file.
10. Files submitted through SFTP are limited to a maximum uncompressed size of 100GB.
11. Files sizes <= 1GB are recommended as feedback will be returned faster.
12. Data files submitted through the CAT Reporter Portal – CAIS are limited to a maximum uncompressed size of 1GB, with a record limit of 100,000 FDID Records per file and 100,000 Customer Records. Files with more than 100,000 FDID Records and/or more than 100,000 Customer Records will be rejected.
13. Schema files will be maintained by the Plan Processor and will be versioned as the Technical Specifications change.

14. Data files submitted to CAT CAIS will be treated as Delta files and updates or changes will only be enacted on records as contained within the submission file. Records previously received and not included in a later submission file will not be changed in CAT CAIS until included in a subsequent submission file.
15. Records included in a submission file must reflect the complete and current state of that record. This includes all pertinent associations and attributes. The new record state will replace the state of the record in CAIS if it had been previously submitted. Any associations that were previously accepted into CAIS, but are omitted in the subsequent submission of the record, will be implicitly ended; likewise, any attributes that were previously accepted but are omitted will be implicitly cleared.
16. Data files may contain original submissions, updates to records contained in prior submissions, Industry Member-initiated corrections of records contained in prior submissions, and record error corrections.
17. Conditional and optional fields without a value will be assumed to be NULL when stored in CAIS. Conditional and optional fields may also be present in a submission with a 'null' value in order to be interpreted as NULL.
18. All Customer and Account data included in the submission file must be appropriate for the CAT Reporter CRD and Correspondent CRD pairing present in the file. If the data being reported is for the Customers and Accounts of the CAT Reporter firm itself, the Correspondent CRD must either be excluded from the file or left as NULL.

5.1.3.1. Reference Data File Submission – FDID

The following rules apply to FDID Records present within Reference Data Files:

1. An FDID being submitted to CAIS must have at least one associated Customer within the submission file.
2. Each FDID included in a submission file must contain all attributes and associations that reflect its current state.
3. If any Customer associated to an FDID within a submission file is rejected due to data validation errors, the FDID and all of its other Customer associations will be rejected as well.
4. In the scenario an Industry Member needs to clear a previously submitted conditional or optional field value, they must omit the field in the new submission, which will implicitly clear the value, or include it in the submission with an explicit value of 'null'. The full state of the FDID must be included as well. For example, if an Industry Member previously ended an FDID Record for a reason other than 'REPLACED', and the Industry Member wants to resume submission of the FDID Record, they can simply omit the *fdidEndDate* and *fdidEndReason* from the submission.
5. Each FDID in a submission file must include any and all applicable *accountType* values that are applicable for the FDID. The *accountType* value of 'ENTITYID' can only be used if the *fdidType* for

the FDID is 'ENTITYID', and the *accountType* value of 'RELATIONSHIP' can only be used if the *fdidType* for the FDID is 'RELATIONSHIP' – as such, the *accountType* values 'RELATIONSHIP' and 'ENTITYID' cannot be used when *fdidType* is 'ACCOUNT'.

6. If the *fdidType* for an FDID is 'RELATIONSHIP' or 'ENTITYID', the *role* of the associated Customer(s) must be 'TRDHOLDER'.
7. In the scenario an Industry Member ends an FDID Record, by including a populated *fdidEndDate* and *fdidEndReason* attribute, but does not include some or all of the currently active LTIDs associations stored in CAIS, the omitted active LTIDs associated to the ended FDID will be ended on behalf of the Firm. The *fdidEndDate* and *fdidEndReason* will be cascaded as the *ltidEndDate* and *ltidEndReason*, respectively.
8. In the scenario an Industry Member ends an FDID Record and an LTID or Customer association to that FDID exists with an *ltidEffectiveDate* and/or *roleStartDate* later than the submitted *fdidEndDate*, the *ltidEffectiveDate* and/or *roleStartDate* will be systematically updated to match the *fdidEndDate* in order to prevent rejection.
9. In the scenario an Industry Member is ending an FDID Record that has currently active LTIDs associated to the ending FDID, and they do not want the date and reasons cascaded, they must explicitly end the LTID-to-FDID association by including the association in the submission file with populated *ltidEndDate* and *ltidEndReason* attributes.
10. Clearing previously set *fdidEndDate* and *fdidEndReason* attributes will not result in implicit reactivation of LTID nor Customer associations of the FDID.
11. If an LTID is associated to multiple FDID Records within a single CAT Reporter Firm, the LTID-to-FDID association must be submitted for each FDID. The associations may be submitted within a single submission file or across multiple submission files as associations are established.
12. If an LTID becomes associated to an FDID that was previously submitted to and accepted by CAT CAIS, the Industry Member must establish the LTID-to-FDID association by including the FDID in a submission file with all appropriate attributes and associations, and include the new LTID within the *largeTraderList* array of the FDID Record.
13. In the scenario an Industry Member is ending an FDID Record that has one or more stored LTID associations where the *ltidEndDate* is set to a date later than the *fdidEndDate* and the association is omitted from the submission, the *ltidEndDate* values stored in CAIS will be updated to the earlier *fdidEndDate* value. The *ltidEndReason* currently set on the association will not be updated if it differs from the submitted *fdidEndReason* value.
14. If an LTID-to-FDID association that was previously stored in CAIS is omitted from an FDID submission record, the association will be implicitly ended. The date the submission was acknowledged by CAIS will be used as the *ltidEndDate* and the *ltidEndReason* will be set to 'ENDED'. The *ltidEffectiveDate* will be unchanged in this case.

15. The *replacedByFDID* value included in a submission file must reference an FDID that is either included in the current submission file or was accepted by CAT CAIS in a prior submission file.
16. If the *replacedByFDID* record in a submission file was not accepted by CAT CAIS in a prior submission file and is not included in the current submission file, or is included in the current submission file but the replacing FDID Record does not pass data validation checks, the submission record referencing the replacing FDID will fail data validation and not be accepted by CAT CAIS.
17. The *correctingFirmDesignatedID* value included in a submission file must reference a corresponding FDID that is either included in the current submission file or was accepted by CAT CAIS in a prior submission file.
18. If the FDID value listed in the *correctingFirmDesignatedID* attribute in a submission file was not accepted by CAT CAIS in a prior submission file and is not included in the current submission file, or is included in the current submission file but the FDID Record does not pass data validation checks, the correcting submission record referencing the FDID Record will fail data validation and not be accepted by CAT CAIS.
19. If a Customer is associated to multiple FDID Records within a single CAT Reporter Firm, the Customer-to-FDID association must be submitted for each FDID. The associations may be submitted within a single submission file or across multiple submission files as associations are established.
20. If a Customer becomes associated to an FDID that was previously submitted to and accepted by CAT CAIS, the Industry Member must establish the Customer-to-FDID association by including the FDID in a submission file with all attributes that apply and including the Customer role within the *fdidCustomerList* array of the FDID Record. The current state of the corresponding Customer record must be included in the submission as well.
21. In the scenario an Industry Member ends an FDID Record, by including a populated *fdidEndDate* and *fdidEndReason* attribute, but does not include some or all of the currently active Customer-to-FDID associations, the omitted associations to the ended FDID will be ended on behalf of the Industry Member. The *fdidEndDate* and *fdidEndReason* will be cascaded as the *roleEndDate* and *roleEndReason*, respectively.
22. In the scenario an FDID has previously been submitted to CAIS without an *fdidEndDate* or *fdidEndReason* set, and the FDID is no longer "Active" as defined by the CAT NMS Plan (i.e., has not had any CAT-reportable transaction activity for the previous six months), an Industry Member can designate the FDID as 'INACTIVE' in CAIS. An *fdidEndReason* of 'INACTIVE' indicates the FDID is not in scope for Full Record Refresh requirements.
23. In the scenario an Industry Member is ending an FDID Record that has currently active Customer associations to the ending FDID, and they do not want the date and reasons cascaded, they must explicitly end the Customer-to-FDID association by including the association in the submission file with populated *roleEndDate* and *roleEndReason* attributes..

24. In the scenario an Industry Member is ending an FDID Record that has one or more stored Customer-to-FDID associations where the *roleEndDate* is set to a date later than the *fdidEndDate* and the association is omitted from the submission, the *roleEndDate* values stored in CAIS will be updated to the earlier *fdidEndDate* value. The *roleEndReason* currently set on the association will not be updated if it differs from the submitted *fdidEndReason* value.
25. If a Customer-to-FDID association is omitted from an FDID submission record that was previously stored in CAIS, the association will be implicitly ended. The date the submission was received by CAIS will be used as the *roleEndDate* and the *roleEndReason* will be set to 'ENDED'. The *roleStartDate* will be unchanged in this case. There are some scenarios where it is not permissible to implicitly end a Customer-to-FDID association. See [Section 3.2: Replacement of Transformed Identifier \(TID\)](#) for more information.
26. Each FDID Record within a submission file must contain at least one Address Record, and may contain up to four total Address Records. When multiple Address Records are included in the file, they must use the address type values corresponding to the counts of addresses in the file. For example, if two Address Records are included, they must be 'ADDRESS1' and 'ADDRESS2'.
27. The FDID submission must contain all current Address Records for the FDID Record. If a previously stored Address Record is not included in a subsequent submission of the FDID, the Address Record(s) that is not received will no longer be stored as an Address of the FDID.
28. CAIS allows for four address lines of up to 40 characters per line, or 160 total characters for each FDID address. Address lines exceeding 40 characters may be continued to the next address line. Industry Members must report each FDID address as it appears in its books and records and are not expected to use specific abbreviations or standardization (e.g., "ST" or "ST." for "Street"), or white space trimming when submitted the address information to CAIS .
29. When the *accountType* of the FDID is 'DVP/RVP', each FDID Record within a submission file must contain a populated value for the *DVPCustodianID* attribute.
30. If an FDID has an *accountType* of 'DVP/RVP' and there is no *DVPCustodianID* assigned to the FDID Record because there is no clearing number or DTC number, then the value of 'FOR' must be used in the *DVPCustodianID* field.
31. Industry Members reporting data for their correspondents, such as a clearing firm reporting Accounts of an introducing broker, are not required to populate the *branchOfficeCRD* attribute for the FDIDs being reported for correspondents. While the *registeredRepCRD* is an optionally reported field, it is likewise not expected for Industry Members reporting data for their correspondents to populate this attribute.
32. When optionally populated, the FDID submission must include any and all *registeredRepCRD* values for current Registered Representatives of the FDID. If a specific CRD that was previously stored for an FDID is not included in a subsequent submission of the FDID, the CRD that is no longer received will no longer be stored in association with the FDID. For Industry Members optionally reporting the

registeredRepCRD, it is not anticipated that *registeredRepCRD* is populated for institutional Accounts, as defined by FINRA Rule 4512(a)(1)(c).

33. Each Customer of an FDID must only ever have one active *role* in association to the FDID at a time. If a Customer changes their *role* – for example, a Holder of the Account that does not have authorization to trade on the Account is granted authorization to trade – the original *role* must be ended either by resubmitting the FDID Record with the Customer's *roleEndDate* and *roleEndReason* or by resubmitting the FDID Record with the Customer's new *role* and *roleStartDate* and omitting the Customer's previous *role* and previous *roleStartDate*. Ending the association and adding the new association may occur within a single submission, however there cannot be overlap between the effective date ranges for each association for a given Customer.
34. Each FDID must have at least one active association to a CAT Customer with trading capabilities. Each FDID must have at least one active association to a CAT Customer with a *role* of 'TRDHOLDER', or at least one active association to a CAT Customer with a *role* of 'AUTH3RD' or 'AUTHREP' where *hasDiscretion* is 'true'.
35. No validation will occur for LTID Dates (*ltidEffectiveDate* and *ltidEndDate*) compared to the associated FDID Dates (*fdidDate* and *fdidEndDate*). However the *ltidEffectiveDate* included in a submission must still be set to a value earlier than the *ltidEndDate* when *ltidEndDate* is populated.
36. If an address record for an FDID is a United States Military or Diplomatic address, the *countryCode* field is to be populated with 'US' and the *regionCode* is to be populated with 'US-AA', 'US-AE', or 'US-AP', as applicable. The *city* field is to be populated with 'APO', 'DPO', or 'FPO' as applicable.
37. In the event a CAT Reporter has closed an account and ended the associated FDID in CAIS, and later reopens the same account and resubmits the FDID to CAIS, then the *fdidDate* in the reopening submission must be updated to reflect the reopening date.

5.1.3.2. Reference Data File Submission – Customer

The following rules apply to Customer records present within Reference Data Files:

1. Each Customer record present in the Reference Data file must have a corresponding entry in the Identifiers file. If a corresponding Identifiers file entry is not present, the Customer Record will be rejected.
2. A Customer being submitted to CAIS must have at least one associated FDID within the submission file.
3. Each Customer included in a submission file must contain all attributes and associations that reflect its current state.
4. If any FDID associated to a Customer within a submission file is rejected due to data validation errors, the Customer will be rejected as well.

5. In the scenario an Industry Member needs to clear a previously submitted conditional or optional field value, they must omit the field in the new submission, which will implicitly clear the value, or include it in the submission with an explicit value of 'null'. The full state of the Customer must be included as well.
6. If the Customer listed in the *correctingCustomerRecordID* is not included in the current submission file, or is included in the current submission file but the Customer record does not pass data validation checks, the correction submission record referencing the Customer record will fail data validation and not be accepted by CAT CAIS.
7. If a Customer becomes associated to an FDID that was previously submitted to and accepted by CAT CAIS, the Industry Member must establish the Customer-to-FDID association by including the FDID in a submission file with all relevant attributes, and including the Customer *role* within the *fdidCustomerList* array of the FDID Record.
8. Each Customer record within a submission file may contain up to four Address Records. It is acceptable to include a Customer record in a submission file without any Address Records. When multiple Address Records are included in the file, they must use the address type values corresponding to the counts of addresses in the file. For example, if two Address Records are included, they must be 'ADDRESS1' and 'ADDRESS2'.
9. The Customer submission must contain all current Address Records for the Customer record. If a previously stored Address Record is not included in a subsequent submission of the Customer, the Address Record(s) that is not received will no longer be stored as an Address of the Customer.
10. CAIS allows for four address lines of up to 40 characters per line, or 160 total characters for each Customer address. Address lines exceeding 40 characters may be continued to the next address line. Industry Members must report each Customer address as it appears in its books and records and are not expected to use specific abbreviations or standardization (e.g., "ST" or "ST." for "Street"), or white space trimming when submitting the address information to CAIS.
11. In the event a single Customer is included with multiple versions of data in a single submission file, the CAT Reporter firm must ensure the following attributes are consistent across all versions – Customer Record type for a 'FOREIGN' *tidType* record (i.e., reporting only as a Natural Person or a Legal Entity), *yearOfBirth*, and *ein*. Failure to maintain consistent data on these attributes will result in the rejection of all instances of the Customer Record.
12. Each Customer in a submission file must include any and all applicable *customerType* values that are applicable for the Customer. In the event that none of the defined terms are applicable for the Customer, the value of 'NOTAPPLICABLE' is to be used.
13. If an Industry Member stores a single name value for its Customer who legally has one name (i.e., a first name but no last name, or a last name but no first name), it must populate the *lastName* field with the name recorded in its books and records and populate the *firstName* field with a value of 'NNVE' (No Name Value Exists). If the Industry Member stores the legal name as both the first name and the

last name (perhaps, due to system requirements), the Industry Member may report the Customer as described above or may populate the stored values in the respective *firstName* field and *lastName* fields.

14. If an address record for an FDID is a United States Military or Diplomatic address, the *countryCode* field is to be populated with 'US' and the *regionCode* is to be populated with 'US-AA', 'US-AE', or 'US-AP', as applicable. The *city* field is to be populated with 'APO', 'DPO', or 'FPO' as applicable.
15. In the scenario that a CAT Reporter has historically maintained CAT Customer names in an unparsed state and will not be able to complete parsing of all CAT Customer names by July 11, 2022, it is acceptable for the CAT Reporter to populate a value of 'UNPARSED' in the *firstName* field. The unparsed name must be populated in the *lastName* field. The CAT Reporter must resubmit the CAT Customer record to CAIS with the first and last names parsed in the required separate *firstName* and *lastName* fields no later than January 11, 2023. 'UNPARSED' will be retired effective January 12, 2023. See [Section 3.11](#) for more details.

5.1.4. Identifiers Data File Submission

The following rules apply to the Identifier Files and the records present within the file:

1. Schema files will be maintained by the Plan Processor and will be versioned as the Technical Specifications change.
2. A single TID may be present within the Transformed Identifiers file in association with differing *customerRecordID* values.
3. Each TID record present in the Identifiers file must reference a record present in the Data file. If a corresponding record is not present in the Data file – either in the *naturalPersonCustomerList* or the *legalEntityCustomerList*, the individual TID entry in the Identifiers file will be rejected and not processed for additional validations.
4. A TID record must be created from an appropriately formatted Input Identifier for 'SSN/ITIN' and 'EIN' inputs – that is, 'SSN/ITIN' values formatted as '999-99-9999' or 'EIN' values formatted as '99-9999999'.
5. Format validation will not occur for 'FOREIGN' identifier types.
6. A TID record must be created from a valid Input Identifier, as noted
 - a. For 'SSN/ITIN'
 - i. No values having an Area Number (first three digits) of 000 nor 666.
 - ii. No values having a Group Number (middle two digits) of 00.
 - iii. No values having a Serial Number (last four digits) of 0000.
 - iv. No values of 111-11-1111, 333-33-3333, 666-66-6666, nor 123-45-6789.
 - b. For 'EIN'

- i. No range validation will occur for TIDs generated from EINs.
7. Associating an 'SSN/ITIN' with a Customer in the *legalEntityCustomerList* or an 'EIN' with a Customer in the *naturalPersonCustomerList* will result in a rejection of the Customer record.
 8. A TID generated from an invalid Input Identifier, or submitted with an incorrect *tidType* value, will cause the Customer record to be rejected.

5.1.5. Paired CAIS Data and Transformed Identifiers File JSON Example

The following JSON example demonstrates how an Industry Member would structure a reference data file submission.

```
{
  "version": "2.0.0",
  "catReporterCRD": 123456,
  "catSubmitterID": 99999,
  "correspondentCRD": 3210,
  "fdidRecordCount": 3,
  "naturalPersonCustomerRecordCount": 3,
  "legalEntityCustomerRecordCount": 1,
  "fdidRecordList": [
    {
      "fdidRecordID": 1,
      "firmDesignatedID": "EZAccount123",
      "fdidType": "ACCOUNT",
      "accountType": ["OPTION"],
      "accountName": "JointMgdAcct",
      "fdidDate": 20190102,
      "addressList": [
        {
          "addrType": "ADDRESS1",
          "addrLine1": "1 WATERS ST",
          "addrLine2": "TRADING DESK 15",
          "city": "JERSEY CITY",
          "regionCode": "US-NJ",
          "countryCode": "US",
          "postalCode": "07097"
        },
        {
          "addrType": "ADDRESS2",
          "addrLine1": "1313 MOCKINGBIRD LANE",
          "city": "CAMELOT",
          "regionCode": "US-NJ",
          "countryCode": "US",
          "postalCode": "08854"
        }
      ]
    },
    {
      "largeTraderRecordID": 1,
      "largeTraderID": "12345678-0001",
      "ltidEffectiveDate": 20190501
    }
  ]
}
```

```

    {
      "largeTraderRecordID": 2,
      "largeTraderID": "98765432-1234",
      "ltidEffectiveDate": 20190501
    }
  ],
  "fdidCustomerList": [
    {
      "customerRecordID": 1,
      "role": "TRDHOLDER",
      "roleStartDate": 20190102
    },
    {
      "customerRecordID": 4,
      "role": "TRDHOLDER",
      "roleStartDate": 20190102
    },
    {
      "customerRecordID": 15,
      "role": "AUTHREP",
      "roleStartDate": 20190501
    }
  ]
},
{
  "fdidRecordID": 2,
  "firmDesignatedID": "MyTestEntity",
  "fdidType": "ENTITYID",
  "accountType": ["ENTITYID",],
  "accountName": "AllAcctTest",
  "fdidEndDate": 20191201,
  "fdidDate": 20170308,
  "fdidEndReason": "ENDED",
  "addressList": [
    {
      "addrType": "ADDRESS1",
      "addrLine1": "1604 RIVERSIDE DRIVE",
      "city": "HILL VALLEY",
      "regionCode": "US-CA",
      "countryCode": "US",
      "postalCode": "91361"
    }
  ]
},
{
  "fdidRecordID": 3,
  "firmDesignatedID": "InternalRel",
  "fdidType": "RELATIONSHIP",
  "accountType": ["RELATIONSHIP"],
  "accountName": "Relationship Acct",
  "fdidDate": 20150121,
  "addressList": [
    {
      "addrType": "ADDRESS1",
      "addrLine1": "84 BEACON ST",
      "city": "BOSTON",

```

```

    "regionCode": "US-MA",
    "countryCode": "US",
    "postalCode": "02101"
  },
  {
    "addrType": "ADDRESS2",
    "addrLine1": "400 PRIVATE DRIVE",
    "city": "LITTLE WHINGING",
    "regionCode": "SURREY",
    "countryCode": "GB",
    "postalCode": "A9A 9A9"
  },
  {
    "addrType": "ADDRESS3",
    "addrLine1": "84 BEACON ST",
    "city": "BOSTON",
    "regionCode": "US-MA",
    "countryCode": "US",
    "postalCode": "07097"
  }
],
"largeTraderList": [
  {
    "largeTraderRecordID": 1,
    "largeTraderID": "98765432-1234",
    "ltidEffectiveDate": 20180501
  },
  {
    "largeTraderRecordID": 2,
    "largeTraderID": "11223344-0001",
    "ltidEffectiveDate": 20180901
  },
  {
    "largeTraderRecordID": 3,
    "largeTraderID": "99887766-6543",
    "ltidEffectiveDate": 20200105
  }
],
"fdidCustomerList": [
  {
    "customerRecordID": 2,
    "role": "AUTH3RD",
    "roleStartDate": 20150121
  },
  {
    "customerRecordID": 15,
    "role": "AUTHREP",
    "roleStartDate": 20200401
  }
]
},
],
"naturalPersonCustomerList": [
  {
    "customerRecordID": 1,
    "firstName": "JOHN",

```

```

"lastName": "DOE",
"nameSuffix": "SENIOR",
"doingBusinessAs": "JOHN'S PLUMBING",
"yearOfBirth": 1980,
"addressList": [
  {
    "addrType": "ADDRESS1",
    "addrLine1": "123 MAIN ST",
    "city": "NEW YORK",
    "regionCode": "US-NY",
    "countryCode": "US",
    "postalCode": "10011"
  }
],
"customerType": ["ACCREDITED"]
},
{
  "customerRecordID": 4,
  "firstName": "JANE",
  "lastName": "DOE",
  "yearOfBirth": 1982,
  "customerType": ["ACCREDITED", "FOREIGN"],
  "updateNotification": true
},
{
  "customerRecordID": 15,
  "firstName": "ALEXANDER",
  "middleName": "W",
  "lastName": "SMYTHE",
  "yearOfBirth": 1975,
  "customerType": ["EMPLOYEE"]
}
],
"legalEntityCustomerList": [
  {
    "customerRecordID": 2,
    "legalName": "PRIMARY TRADING",
    "addressList": [
      {
        "addrType": "ADDRESS1",
        "addrLine1": "1 WATERS ST",
        "addrLine2": "TRADING DESK 15",
        "city": "JERSEY CITY",
        "regionCode": "US-NJ",
        "countryCode": "US",
        "postalCode": "07097"
      }
    ]
  },
  "customerType": ["BD"]
}
],
"correctionList": [
  {
    "rejectionID": 1127,
    "correctionAction": "CORRECTION",
    "correctingFirmDesignatedID": "EZAccount123"
  }
]

```

```

    },
    {
      "rejectionID": 821,
      "correctionAction": "DELETE"
    }
  ]
}

```

The following JSON example demonstrates how an Industry Member would structure the companion identifier file submission.

```

{
  "version": "2.0.0",
  "tidRecordCount": 4,
  "tidRecordList": [
    {
      "customerRecordID": 1,
      "tidType": "SSN/ITIN",
      "tidValue":
"01a54629efb952287e554eb23ef69c52097a75aecc0e3a93ca0855ab6d7a31a0"
    },
    {
      "customerRecordID": 2,
      "tidType": "FOREIGN",
      "foreignTIDType": "PASSPORT",
      "foreignTIDCountryCd": "GB",
      "tidValue":
"26f917bb38d0309e438e57e06a241473ed7a59bae503712dee9c5cff3ecb50e7"
    },
    {
      "customerRecordID": 4,
      "tidType": "SSN/ITIN",
      "tidValue":
"4628ea314743d5ac373997763be3d39b86fc40c5d2015d2db345b0231e215b6c"
    },
    {
      "customerRecordID": 15,
      "tidType": "EIN",
      "tidValue":
"ac7dd472ecaede73cb8dce1d9a68b7e2e33f87d9baee6ac6157bb8044365129e"
    }
  ]
}

```

5.1.6. Schema

An Industry Member Schema file that details the structure and expected contents of every CAIS file submission is available on the CAT public website. The schema file will be maintained by the Plan Processor and will be versioned as the Account and Customer file formats change. The CAT CAIS schema file will use the JSON schema format as defined at <https://json-schema.org/>.

5.1.6.1. Schema Version

Schema changes will be updated when changes to the CAT Reporting Technical Specifications for Industry Members occur that impact the schema. The following rules apply:

1. The Schema Version is formatted as <Major>.<Minor>.<Patch>. All digits must be represented.
 - **Major** – updated when a change occurs that impacts all or a significant portion of Industry Member CAT Reporters. In such cases, the schema is not backward compatible and will be specified accordingly.
 - **Minor** – updated when a change occurs that does not require coding changes for all Industry Member CAT Reporters. In such cases, the schema is backward compatible with support for previous version(s) as specified.
 - **Patch** – updated when a change occurs that does not require coding changes for any Industry Member CAT Reporters.
2. Records contained in a Data File must be formatted as per the Schema Version noted in the submission file.
3. Feedback provided by CAT CAIS will set the *feedbackVersion* equal to the applicable Schema Version for the submission file.

5.1.6.2. Schema Definition

The schema file is a JSON format file that represents the following:

1. **Data Types** – CAT defined data types containing the following elements:
 - **dataType**: Data Type (e.g., Text) as defined in Table 6: Data Types
 - **JSONDataType**: JSON standard data type to be used to submit data of this type.
 - **maxLength**: Maximum length of the string submission. Applicable to text and alphanumeric types only.
2. **Choices** – For choice data types, the list of possible values.
3. **Name/Value Pairs** – Field specifications for Name/Value Pair fields.
 - **name**: Field Name.
 - **dataType**: Data Type or an array of Data Types.
 - **JSONDataType**: The JSON standard data type or an array of JSON standard data types.
 - **required**: Indicates whether the field is "Required," "Conditional," or "Optional."

5.2. Connectivity

Connectivity to CAT will be through at least one of the following methods:

- Private Line provided by a Managed Network Service Provider (MNSP)
- AWS PrivateLink ³
- CAT Secure Reporting Gateway (SRG) Reporter Portal

Both the Private Line and AWS PrivateLink connectivity methods will support the CAT File Transfer service, which provides access for automated, machine-to-machine file submissions, acknowledgements, rejections, and corrections using the Secure File Transfer Protocol (SFTP) service as well as to the CAT Reporter Portal for interactive reporting through web-based forms or manual file uploads.

The CAT Secure Reporting Gateway (SRG) connectivity method will only support the CAT Report Portal. The SRG requires multi-factor authentication (MFA) to establish a secure, encrypted session before accessing the CAT Reporter Portal. The SRG requires the use of modern browsers supporting HTML5 and TLS (Transport Layer Security). No client software installation is required.

The combinations of Connectivity and Interface Methods are summarized below.

Table 12: Connectivity Methods and Supported CAT Interfaces Methods

Connectivity Methods	Interface Methods	
	CAT File Transfer	CAT Reporter Portal - CAIS
Private Line provided by MNSP	Y	Y
AWS PrivateLink	Y	Y
CAT Secure Reporting Gateway (SRG)	N	Y

For a detailed description of the CAT Connectivity Methods, including instructions for establishing access and connectivity to the CAT system, refer to the [FINRA CAT Connectivity Supplement for Industry Members](#).

5.3. CAT Interface Methods

The interface methods available to Industry Members and CAT Reporting Agents to submit data and retrieve reporting feedback include CAT File Transfer and the CAT Reporter Portal. For a detailed description of the CAT Interface Methods, including instructions for establishing access and connectivity

³ Industry Members and CAT Reporting Agents interested in AWS PrivateLink should contact the FINRA Helpdesk at 888-696-3348 or at help@finracat.com.

to the CAT system, refer to the [FINRA CAT Connectivity Supplement for Industry Members](#) and the [CAT CAIS Reporter Portal User Guide](#).

The following identifies the types of CAT information with the respective interface methods available for each:

Table 13: CAT Data and Feedback Interface Methods

CAT Data Submission and Feedback	Category	CAIS SFTP	CAT Reporter Portal – CAIS	CAT Reporter Portal
Submission of CAT CAIS files	Submission	✓	✓	
Resubmission of Rejected Files/Records, Corrections and Update Notifications	Submission	✓	✓	
Interactive CAT Reportable Account Entry	Submission		✓	
Interactive CAT Reportable Customer Entry	Submission		✓	
File Status Retrieval	Feedback	✓	✓	
Reporting Statistics	Feedback		✓	
Error Feedback	Feedback	✓	✓	
Data Inconsistencies Feedback	Feedback	✓	✓	
CAIS System Status and Announcements	Feedback		✓	
FDID Reconciliation Report	Feedback		✓	
FDID Refresh Report	Feedback	✓	✓	
Account Maintenance	Administration			✓
Establishment of Reporting Relationships	Administration			✓

5.3.1. CAT File Transfer

The CAT File Transfer method is an automated, machine-to-machine interface utilizing the Secure File Transfer Protocol (“SFTP”) for file submissions, acknowledgements, rejections and corrections. SFTP enables Industry Members and CAT Reporting Agents to create machine-to-machine connections to securely transmit data and retrieve data from FINRA CAT. In order to ensure Customer and Account reference data is never commingled with the TID value, the two file types must be posted to separate SFTP sites.

There are two separate host sites that are utilized for CAIS data reporting to ensure the separation of the Customer and Account data submissions from the identifiers file. This additional physical separation for file posting further increases the security of the data within the identifiers file, and the separate directory structure reduces risks of files being cross-posted to the incorrect directory.

The following is the SFTP directory structure that will be made available in the submitter’s home directory for posting Customer and Account reference data, and received feedback and inconsistencies files. Files

associated with reference data submissions, associated feedback, and identified data inconsistencies will be uploaded in SFTP directories as per the following table.

Table 14: SFTP Directories – CAIS Data, Feedback, and Inconsistencies

Reference Data SFTP Directory	Usage
/submitterID/cat/cais/upload	SFTP submissions uploaded by Submitters including Reference Data files. CAT will move files from this directory for further processing.
/submitterID/cat/cais/feedback	Feedback files associated with data submission file processing.
/submitterID/cat/cais/inconsistencies	Feedback files containing inconsistencies identified during daily CAT CAIS data scanning.
/submitterID/cat/cais/reports	Directory for the FDID Version Report and FDID Refresh Report.

The following is the SFTP directory structure that will be made available on the separate host site for posting the Transformed Identifiers file, and received feedback files.

Table 15: SFTP Directory – Transformed Identifiers file

Identifiers Data SFTP Directory	Usage
/submitterID/cat/tid/upload	SFTP submissions uploaded by Submitters including Identifiers files. CAT will move files from this directory for further processing.
/submitterID/cat/tid/feedback	Feedback files associated with identifier submission file processing.

The following rules apply:

1. Processing is initiated when a file appears in the /submitterID/cat/cais/upload directory paired with a corresponding file in the /submitterID/cat/tid/upload directory only.
2. Files posted to /submitterID/cat/cais/upload without a corresponding file submission posted to /submitterID/cat/tid/upload will be rejected one hour after posting.
3. Files posted to /submitterID/cat/tid/upload without a corresponding file submission posted to /submitterID/cat/cais/upload will be rejected one hour after posting.
4. CAT will remove files from the upload directory as soon as each file upload is complete.
5. The Submitter must not delete files from the /submitterID/cat/cais/upload directory.
6. Due to the CAT NMS Plan-Defined PII considerations of the Account and Customer data, a copy of uploaded files will not be made available to the CAT Reporter or Submitter after submission.
7. Industry Members using SFTP will be able to obtain Feedback Files for files submitted through the SFTP, as well as any files submitted through the CAT Reporter Portal - CAIS through either file upload or manual submission.

5.3.2. CAT Reporter Portal - CAIS

The CAT Reporter Portal – CAIS is a web interface utilizing secure encryption protocols (HTTPS/TLS) and multifactor authentication (MFA). The CAT Reporter Portal - CAIS will facilitate data submissions using the following methods:

- Manual data file uploads for files up to 1GB in size and limited to 100,000 FDID and 100,000 Customer records meeting all requirements of data files as specified in 5.1.3.
- Data entry for original submissions, repairs for CAT-identified errors, and Industry Member-initiated corrections and deletion instructions. These entries will be converted to submission files generated by the portal. Because these files will contain CAT NMS Plan-Defined PII data, they will not be available to download after submission.
- The CAT Reporter Portal - CAIS will include a summary view screen for records created through manual submission that contains the record data which will be submitted, allowing users to confirm, and capture for their records, the details of their submission.
- Industry Members using the CAT Reporter Portal - CAIS will not be able to view the full details of the originally submitted record for correction of CAT-identified errors for data security. The CAT Reporter Portal - CAIS will only display the following attributes regarding the error record, and will require entry of all other data attributes to be included in the submission:
 - ♦ *catReporterCRD*
 - ♦ *catSubmitterID*
 - ♦ *firmDesignatedID*
 - ♦ *fdidRecordID*
 - ♦ *customerRecordID* (if error is against a Customer record or an FDID-to-Customer association)
 - ♦ *largeTraderRecordID* (if error is against a Large Trader record)
 - ♦ *rejectionID*
 - ♦ *errorCodeID*
- Industry Members using the CAT Reporter Portal - CAIS will only be able to view Feedback Files for files submitted through the CAT Reporter Portal - CAIS. They will not be able to view Feedback Files for files posted via SFTP.

5.4. CAT CAIS Reporting Hours

5.4.1. Submission of CAT Account and Customer Data

The CAT NMS Plan requires Industry Members to report Received Industry Member Data, which includes Customer and Account data, by 8:00 a.m. Eastern Time on the CAT Trading Day following the day the

Industry Member receives such Received Industry Member Data. Customer and Account data may be bulk uploaded at the end of the CAT Trading Day, or may be submitted in batches with associated uploads throughout the day. All creation of, or modifications to, CAT reportable Customers and Accounts are required to be submitted to CAT CAIS by 8:00 a.m. Eastern Time on the CAT Trading Day following the day such information was received by the Industry Member.

Weekends or any day that all equities or options national securities exchanges are closed are not considered a CAT Trading Day.

5.4.2. Deadline of Repair for Errors Identified by CAT CAIS

For data submitted by 8:00 a.m. ET, errors will be identified by CAT CAIS and provided to Industry Members by no later than 5:00 p.m. ET on the CAT Trading Day such information was submitted to CAT. Once available, repairs can be made immediately. All repairs must be submitted by 5:00 p.m. Eastern Time 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.

CAT specifications allow for Industry Members to correct Customer and Account submissions that did not produce an error during processing at any time after original submission. Industry Member-initiated corrections will be handled in the same method as any other update to the existing Customer or Account record.

5.4.3. Deadline of Repair of Data Inconsistencies or Confirmation of Data Accuracy Identified by CAT CAIS

For data submitted by 8:00 a.m. ET, data inconsistencies present within the submission file will be identified by CAT CAIS and provided to Industry Members by no later than 5:00 p.m. ET on the CAT Trading Day such information was submitted to CAT. Once available, data repairs or confirmations can be made immediately. All repairs or confirmations must be submitted by 5:00 p.m. Eastern Time on the third CAT Trading Day after the Customer or Account information became available to the Industry Member. Repairs or confirmations received after the repair deadline will be accepted but considered late.

CAT CAIS will also conduct cross CAT Reporter inconsistency scanning across all records previously submitted by the Industry Members on a daily basis. Data inconsistencies identified against prior submissions will be identified by CAT CAIS and provided first to the Industry Member whose data submission caused the inconsistency. All repairs or confirmations must be submitted by 5:00 p.m. Eastern Time on the third CAT Trading Day after the inconsistency was identified. If the Industry Member confirms their current data submission is correct, or submits an update to their data that leaves data inconsistent for the Customer record, all other CAT Reporter Firms who have an active version of the same Customer

record with the inconsistency will then be notified of the Material Inconsistency. All repairs or confirmations must be submitted by 5:00 p.m. Eastern Time on the third CAT Trading Day after the inconsistency was reported to the Industry Member.

5.5. Security

5.5.1. Encryption (In-transit)

TLS-based encryption, version 1.2 minimum, is required for connection to the CAIS Reporter Portal (whether accessed via private line or the SRG) and to the Security Reporter Gateway itself.

For SFTP, in addition to the fact that the SFTP service is only accessible via private line, traffic will be encrypted by virtue of the intrinsic encryption capabilities of SFTP. AES256 will be supported for SFTP; support for other encryption protocols is under evaluation.

5.5.2. Encryption (At-rest)

The CAT CAIS system will use native AWS encryption features to encrypt data upon receipt. No action is required by the Industry Member.

5.5.3. Authentication

Two-factor authentication will be required for access to the CAIS Reporter Portal. The first factor will be username and password which will require periodic rotation.

The second factor will be via push notification to an off-the-shelf application installed on a mobile device provided by the user. The user will be required to install the application to their mobile device through their mobile operating system's application store and then complete a registration process on the CAT Reporter Portal or SRG. There is no cost to the CAT Reporter or the user for this mobile application.

The SFTP service similarly requires that two conditions be met to access the interface. The first factor is authentication via username and password. The second is the use of a defined IP source address that is established during initial onboarding. The SFTP system implements an IP whitelist that prevents access from any system not on the whitelist.

More detailed information related to Security is described in the [FINRA CAT Connectivity Supplement for Industry Members](#) available at <https://www.catnmsplan.com/registration/>.

6. Feedback and Corrections

CAT provides feedback associated with CAT CAIS submissions for CAT Reporters and Submitters as follows:

- **File Status:** available via SFTP and the CAT Reporter Portal - CAIS, indicates the acceptance or associated errors with a submission file.
- **Reporting Statistics:** available via the CAT Reporter Portal - CAIS, daily summary statistics representing reporting activity and errors for prior submissions. Error Rate is also included.
- **Error Feedback:** available via SFTP and the CAT Reporter Portal - CAIS, errors found during processing will be made available, including error code, affected FDID, and associated record ID(s) from the submission file.
- **Corrections Feedback:** available via the CAT Reporter Portal - CAIS, information is provided for the repair status of all corrections. When an error has been corrected, the updated status will be reflected.
- **Inconsistency Feedback - Submissions:** available via SFTP and the CAT Reporter Portal - CAIS, inconsistencies found during processing will be made available, including inconsistency code, affected record, and associated record ID(s) from the submission file.
- **Inconsistency Feedback – Scans:** available via SFTP and the CAT Reporter Portal - CAIS, inconsistencies found in comparing accepted versions of the same Customer from multiple CAT Reporters will be made available, including inconsistency code, details about the submission file that last contained the Customer record, and associated record ID(s) from the submission file.
- **System Status and Announcements:** available via the CAT Reporter Portal - CAIS, the status of CAT processing will be made available with a distinction for instances when a processing delay or issue is occurring. Additionally, announcements related to system maintenance and upcoming changes will be presented.

This section describes the procedures for obtaining feedback and making corrections/deletions associated with feedback of errors. Additionally, this section describes the requirement for making correction/deletions for accepted data for which there was no feedback.

6.1. File and Error Feedback

A feedback file will be made available for each submission file that is acknowledged as uploaded. This file will contain information about current status, as well as previously completed steps in the ingestion process. Feedback related to the following processing steps is expected to be made available within the following timelines:

Table 16: 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

6.1.1. Feedback Generation

Feedback associated with all processing stages will be made available via SFTP and/or the CAT Reporter Portal - CAIS as described in Table 13: CAT Data and Feedback Interface Methods. A series of feedback files will be generated for each file submission as the file progresses through each stage of processing. The file names will have the same base portion, but with differing *version* values.

For Feedback files made available via SFTP, the following rules apply:

1. The format of feedback files will be JSON.
2. Feedback files for data submissions will be accessible under the `cat/cais/feedback` directory in the Submitter's home directory on the Feedback SFTP server.
3. Feedback files for identifier submissions will be accessible under the `cat/tid/feedback` directory in the Submitter's home directory on the Feedback SFTP server.
4. In addition to the feedback posted to the Submitter's home directories, the feedback for data submitted by a CAT Submitter on behalf of a CAT Reporter will be accessible under the CAT Reporter's home directory on the Feedback SFTP server after the file has passed file integrity checks if the CAT Reporter has an SFTP account.
5. If a file is rejected for a file integrity error, it will not proceed to the next processing stage.
6. The minimum retention time for feedback files on the SFTP server is 10 calendar days. After that time, they may be removed from the server. Feedback will be available via the CAT Reporter Portal - CAIS for 10 calendar days. Metadata regarding the submission will be available via the CAT Reporter Portal – CAIS for at least 90 days.

6.1.2. Feedback File Names and Format

1. Feedback Files created by CAT CAIS will be named using the following format:

<original File Base Name>.<version>.feedback.<Format Extension>.<Compression type>

Example: SUBID_MYID_20200101_CAIS_000123.v1.feedback.json.bz2

Example: SUBID_MYID_20200101_TIDS_000123.v1.feedback.json.bz2

Example: SUBID_MYID_20200101_INCONSISTENCIES_000123.v1.feedback.json.bz2

2. If a single Industry Member submits multiple files having the same original File Base Name, a file version will be appended to the Original File Base name – separate from the *version* attribute of the feedback file name – so that the feedback file for each *version* submitted can be retained.
3. Separate feedback files will be provided for the data and identifiers files, as well as for inconsistencies resulting from data within the submission.

Table 17: Elements of a Data Feedback file

Field Name	Data Type	JSON Object	Include Key	Description
version	Text(10)	Main	R	The schema version of the feedback file used for providing the response.
submissionID	Unsigned	Main	R	The unique Submission ID assigned to the paired data and identifier submission files by the CAT CAIS system. Used to identify the single submission activity. If the same file name is submitted across multiple submissions, each submission instance will have a separate and unique Submission ID value.
submitterUsername	Text (200)	Main	R	The name associated to the CAT User ID of the account used to submit the file to CAT CAIS.
catSubmitterID	Unsigned	Main	R	The unique identifier assigned to the Submitter firm by CAT.
catReporterCRD	Unsigned	Main	R	The unique CRD identifier assigned to the CAT Reporter to whom the data belongs.
correspondentCRD	Unsigned	Main	C	The unique CRD identifier assigned to the related Introducing Broker or Correspondent firm. Only present when <i>correspondentCRD</i> is populated in the submission file.
submissionStatus	Choice	Main	R	The current status of the submission file in the processing flow. VALUES: <ul style="list-style-type: none"> • FILE_ACKNOWLEDGED – indicates the file was acknowledged as having

Field Name	Data Type	JSON Object	Include Key	Description
				<p>been submitted, and has picked up for file integrity checks.</p> <ul style="list-style-type: none"> • FILE_INTEGRITY_PASSED – indicates the file passed file integrity checks, and will now be processed through record data validations. • RECORD_SCAN_COMPLETED – indicates the file has completed record validations. If one or more records passed record validation, they will now be loaded to CAIS. Details about any rejected records are now available within the feedback file in the <i>rejectionItems</i> section. • COMPLETED_WITHOUT_REJECTIONS – indicates the file has completed loading into the CAIS, and no data validation errors were encountered. No further updates will be made to the feedback file. • COMPLETED_WITH_REJECTIONS – indicates the file has completed loading into the CAIS, and one or more data validation errors were encountered. No further updates will be made to the feedback file. • COMPLETED_INTEGRITY_ERROR – indicates the file failed file integrity checks and cannot be processed. No further updates will be made to the feedback file upon reaching this status. • COMPLETED_FILE_TIMEOUT – indicates the paired Identifiers file was not received within the prescribed time frame. No further updates will be made to the feedback file. • INCOMPLETE_PROCESSING_FAILURE – indicates the file had an unexpected error and could not be processed. No further updates will be made to the feedback file. • CANCELLED_BY_SUPPORT – indicates the submission was cancelled by CAIS Support staff. No further updates will be made to the feedback file.
receiptTimestamp	Timestamp (String)	Main	R	The time at which the file was acknowledged to have been submitted for processing.
completedTimestamp	Timestamp (String)	Main	C	The time at which the file completed processing, reaching a completed status. Only populated after the file has reached a final status.
receivedFDIDRecordCount	Unsigned	Main	C	Total count of FDID Records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED

Field Name	Data Type	JSON Object	Include Key	Description
				or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
successfulFDIDRecordCount	Unsigned	Main	C	Total count of FDID Records processed without record validation errors. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
receivedNaturalRecordCount	Unsigned	Main	C	Total count of Natural Person Customer Records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
successfulNaturalRecordCount	Unsigned	Main	C	Total count of Natural Person Customer Records processed without record validation errors. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
receivedLegalEntityRecordCount	Unsigned	Main	C	Total count of Legal Entity Customer Records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
successfulLegalEntityRecordCount	Unsigned	Main	C	Total count of Legal Entity Customer Records processed without record validation errors. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
receivedCorrectionActionCount	Unsigned	Main	C	Total count of Correction Action records present within the file. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
successfulCorrectionActionCount	Unsigned	Main	C	Total count of Correction Action records processed without record validation warnings. Only populated when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
statusHistory	Name/Value Pair	Main	R	Includes the list of events and corresponding timestamps from file processing. Includes the following Name attributes: <ul style="list-style-type: none"> • FILE_ACKNOWLEDGED • FILE_INTEGRITY_PASSED

Field Name	Data Type	JSON Object	Include Key	Description
				<ul style="list-style-type: none"> RECORD_SCAN_COMPLETED COMPLETED_WITH_REJECTIONS COMPLETED_WITHOUT_REJECTIONS COMPLETED_FILE_TIMEOUT CANCELLED_BY_SUPPORT
rejectionItems	Multi-Dimensional Array	Main	C	Includes the list of file integrity error codes or records having data validation errors. Only present if the file had an integrity error or at least one record had a data validation error, and only when the file has reached the interim status of RECORD_SCAN_COMPLETED or the final statuses of COMPLETED_WITH_REJECTIONS or COMPLETED_INTEGRITY_ERROR .
rejectionID	Unsigned	Rejection Record	R	The unique ID reference for the particular record rejection reported on the FDID within the Submission File.
firmDesignatedID	Text (40)	Rejection Record	C	The FDID of the record having the data validation error.
fdidRecordID	Unsigned	Rejection Record	C	A unique numeric reference to the FDID Record within the particular submission file.
largeTraderRecordID	Unsigned	Rejection Record	C	A unique numeric reference to the Large Trader record in association to the FDID Record within the particular submission file. Only populated on Large Trader rejections.
customerRejectionEventID	Unsigned	Rejection Record	C	The unique Customer Rejection Event ID assigned to the CAT Reporter Firm for the specific Customer – by TID – having one or more Rejections. This ID is used because the CAT NMS Plan-Defined PII – including TID – of the Customer cannot be returned to the CAT Reporter after it is submitted to CAT. The unique ID is associated to the specific Customer TID for subsequent submissions of the Customer with rejections, until the Customer is cleanly accepted into CAIS.
customerRecordID	Unsigned	Rejection Record	C	A unique numeric reference to the Customer Record within the particular submission file. Only populated on Customer rejections or on FDID rejections for an FDID-to-Customer association.
addrType	Text (2)	Rejection Record	C	A reference to the Address Type of the record within the particular submission. Only populated when the Address of the record resulted in the rejection. When populated, either <i>firmDesignatedID</i> or <i>customerRecordID</i> will always be populated.
authTraderNameID	Unsigned	Rejection Record	C	A unique reference to a single Authorized Trader Name for a single FDID, for a single submission file. Only populated when the Authorized Trader

Field Name	Data Type	JSON Object	Include Key	Description
				Name of the record resulted in the rejection.
errorCode	Unsigned	Rejection Record	R	The error code of the data validation, noting which attribute caused the rejection for the FDID or Customer Record.
rejectionTimestamp	Timestamp	Rejection Record	R	Indicates the time at which the validation error was identified.
failedCorrectionItems	Multi-Dimensional Array	Main	C	Includes the list of Correction Action records having data validation warnings. Only present if at least one record had a data validation warning, and only when the file has reached the interim status of RECORD_SCAN_COMPLETED or a final status of COMPLETED_WITHOUT_REJECTIONS or COMPLETED_WITH_REJECTIONS .
failedRejectionID	Unsigned	Failed Correction Record	R	The unique ID reference reported in the submission file for the Correction Action that was not able to be processed.
warningCode	Unsigned	Failed Correction Record	R	The warning code of the data validation, noting which attribute caused the Correction Action to not be able to be processed.

Table 18: Elements of an Identifiers Feedback file

Field Name	Data Type	JSON Object	Include Key	Description
version	Text(10)	Main	R	The schema version of the feedback file used for providing the response.
submissionID	Text(36)	Main	R	The unique Submission ID assigned to the paired data and identifier submission files by the CAT CAIS system. Used to identify the single submission activity. If the same file name is submitted across multiple submissions, each submission instance will have a separate and unique Submission ID value.
submissionStatus	Choice	Main	R	The current status of the submission file in the processing flow. VALUES: <ul style="list-style-type: none"> FILE_ACKNOWLEDGED – indicates the file was acknowledged as having been submitted, and has picked up for file integrity checks. FILE_INTEGRITY_PASSED – indicates the file passed file integrity checks, and will now be processed through record data validations. RECORD_SCAN_COMPLETED –

Field Name	Data Type	JSON Object	Include Key	Description
				<p>indicates the file has completed record validations. If one or more records passed record validation, they will now be loaded to CAIS. Details about any rejected records are now available within the feedback file in the <i>rejectionItems</i> section.</p> <ul style="list-style-type: none"> • COMPLETED_INTEGRITY_ERROR – indicates the file failed file integrity checks and cannot be processed. No further updates will be made to the feedback file upon reaching this status. • COMPLETED – indicates the paired data and identifiers files have been successfully loaded into CAIS. Please refer to the feedback file for details regarding outcomes of record validations. • COMPLETED_FILE_TIMEOUT – indicates the paired Data file was not received within the prescribed time frame. No further updates will be made to the feedback file. • INCOMPLETE_PROCESSING_FAILURE – indicates the file had an unexpected error and could not be processed. No further updates will be made to the feedback file. • CANCELLED_BY_SUPPORT – indicates the submission was cancelled by CAIS Support staff. No further updates will be made to the feedback file.
receiptTimestamp	Timestamp (String)	Main	R	The time at which the file was acknowledged to have been submitted for processing.
completedTimestamp	Timestamp (String)	Main	C	The time at which the file completed processing, reaching a completed status. Only populated after the file has reached a final status.
receivedTIDsCount	Unsigned	Main	C	Total count of TID records present within the file. Only populated when the file has reached the final status of COMPLETED .
successfulTIDsCount	Unsigned	Main	C	Total count of TID records processed without record validation warnings. Only populated when the file has reached the final status of COMPLETED .
statusHistory	Name/Value Pair	Main	R	<p>Includes the list of events and corresponding timestamps from file processing. Includes the following Name attributes:</p> <ul style="list-style-type: none"> • FILE_ACKNOWLEDGED • FILE_INTEGRITY_PASSED • RECORD_SCAN_COMPLETED • COMPLETED_INTEGRITY_ERROR

Field Name	Data Type	JSON Object	Include Key	Description
				<ul style="list-style-type: none"> COMPLETED CANCELLED_BY_SUPPORT
rejectionItems	Multi-Dimensional Array	Main	C	Includes the list of file integrity error codes or records having data validation errors. Only present if the file had an integrity error or at least one record had a data validation error, and only when the file has reached the interim status of RECORD_SCAN_COMPLETED or the final statuses of COMPLETED_WITH_REJECTIONS or COMPLETED_INTEGRITY_ERROR .
rejectionID	Unsigned	Rejection Record	C	The unique ID reference for the particular record warning reported on the TID within the Submission File. Populated if a file integrity error occurs in the TIDs file.
customerRecordID	Unsigned	Rejection Record	C	A unique numeric reference to the Customer Record within the particular submission file. Always populated unless the rejection resulted from a malformed or missing <i>customerRecordID</i> .
errorCode	Unsigned	Rejection Record	C	The error code of the data validation, noting which attribute caused the rejection for the TID record.
rejectionTimestamp	Timestamp	Rejection Record	R	Indicates the time at which the validation error was identified.

Table 19: Elements of a Submission Inconsistencies Feedback file

Field Name	Data Type	JSON Object	Include Key	Description
version	Text(10)	Main	R	The schema version of the feedback file used for providing the response.
submissionID	Unsigned	Main	R	The unique Submission ID assigned to the paired data and identifier submission files by the CAT CAIS system. Used to identify the single submission activity. If the same file name is submitted across multiple submissions, each submission instance will have a separate and unique Submission ID value.
catSubmitterID	Unsigned	Main	R	The unique identifier assigned to the Submitter firm by CAT.
catReporterCRD	Unsigned	Main	R	The unique CRD identifier assigned to the CAT Reporter to whom the data belongs.
correspondentCRD	Unsigned	Main	C	The unique CRD identifier assigned to the related Introducing Broker or Correspondent firm. Only present when <i>correspondentCRD</i> is populated in the submission file.
submissionStatus	Choice	Main	R	The current status of the submission file in the processing flow. VALUES:

Field Name	Data Type	JSON Object	Include Key	Description
				<ul style="list-style-type: none"> • COMPLETED_INTEGRITY_ERROR – indicates data and/or identifiers file failed file integrity checks and cannot be processed, and as such no inconsistency scanning occurred. No further updates will be made to the feedback file upon reaching this status. • COMPLETED – indicates the paired data and identifiers files have been successfully loaded into CAIS and all identified inconsistencies have been detailed within the feedback file. • COMPLETED_FILE_TIMEOUT – indicates the corresponding paired file was not received within the prescribed time frame. No further updates will be made to the feedback file. • INCOMPLETE_PROCESSING_FAILURE – indicates the file had an unexpected error and could not be processed. No further updates will be made to the feedback file.
inconsistencyEventCount	Unsigned	Main	R	The count of the Inconsistency Events reported within the Inconsistency Feedback file.
inconsistencyList	Multi-Dimensional Array	Main	C	The list of Inconsistencies identified across the Active Customer Records accepted into CAIS from this CAT Reporter firm.
inconsistencyEventID	Unsigned	Inconsistency Record ID	R	The unique Inconsistency Event ID assigned to the CAT Reporter Firm for the specific Customer – by TID – having one or more Inconsistencies. This ID is used because the CAT NMS Plan-Defined PII – including TID – of the Customer cannot be returned to the CAT Reporter after it is submitted to CAT.
customerRecordID	Unsigned	Inconsistency Record	R	A unique numeric reference to the Customer Record within the particular submission file having the inconsistency.
materialInconsistencies	Name/Value Pair	Inconsistency Record	C	Includes the list of Material Inconsistency Codes and Count of Conflicting CAT Report Firms of the identified inconsistencies for the Customer Record.
minorInconsistencies	Name/Value Pair	Inconsistency Record	C	Includes the list of Minor Inconsistency Codes and Count of Conflicting CAT Report Firms of the identified inconsistencies for the Customer Record. Minor Inconsistencies do not require repair or confirmation.
updateNotifications	Array	Inconsistency Record	C	Includes the list of <i>customerRecordIDs</i> on which Update Notifications were reported in the submission file that were acknowledged and bypassed a Material Inconsistency notification.

6.1.3. JSON Examples of Feedback File for file acknowledgement

The following is an example of a data feedback file after the submission has been acknowledged and accepted for file integrity checks:

Original Data File Submission File Name	123_456_20200204_CAIS_000123.json.bz2
Data Feedback File Name	123_456_20200204_CAIS_000123.v1.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 7, "submitterUsername": "caisimusr", "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "FILE_ACKNOWLEDGED", "receiptTimestamp": "20200204T152233.000045", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045" } }</pre>

The following is an example of an identifiers feedback file after the submission has been acknowledged and accepted for file integrity checks:

Original Identifiers File Submission File Name	123_456_20200204_TIDS_000123.json.bz2
Identifiers Feedback File Name	123_456_20200204_TIDS_000123.v1.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "FILE_ACKNOWLEDGED", "receiptTimestamp": "20200204T152233.000045", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045" } }</pre>

6.2. File Integrity

During the File Integrity processing stage, the submission file contents are also validated to ensure they are readable and formatted as expected.

The following rules apply:

1. Data filenames which duplicate prior submissions accepted during File Integrity will reject, unless the original file had a file integrity error.
2. Data files which are not readable will reject.
3. Data files which do not have a paired Identifiers file posted within 60 minutes will reject.
4. Data files which include inaccurate counts of records will reject.

5. Identifiers files which include inaccurate counts of TIDs will reject.
6. Identifiers files which do not have a paired Data file posted within 60 minutes will reject.
7. The CAT Submitter ID of the files must be equal to the Submitter ID of the submitter that sent the files (as determined from SFTP or CAT Reporter Portal - CAIS username).
8. The CAT Reporter CRD within the filename must match the CAT Reporter CRD populated in the data file.
9. The paired Data and Identifiers files must be submitted by the same Industry Member.
10. If the CAT Submitter is reporting on behalf of the CAT Reporter, a Reporting Relationship must be effective.
11. Data files that have an Integrity Error will result in the paired Identifiers file also having an Integrity Error; likewise, Identifiers files that have an Integrity Error will result in the paired Data file also having an Integrity Error.
12. If the Data and Identifiers files reach an Integrity Error state, the Inconsistencies submission feedback will also note the Integrity Error and no inconsistencies feedback will be included.

6.2.1. JSON Examples for File Integrity Feedback

File Submission Integrity Success:

Original Data File Submission File Name	123_456_20200204_CAIS_000123.json.bz2
Data Feedback File Name	123_456_20200204_CAIS_000123.v2.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 7, "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "FILE_INTEGRITY_PASSED", "receiptTimestamp": "20200204T152233.000045", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045", "FILE_INTEGRITY_PASSED": "20200204T152234.123245" } }</pre>

Original Identifiers File Submission File Name	123_456_20200204_TIDS_000123.json.bz2
Identifiers Feedback File Name	123_456_20200204_TIDS_000123.v2.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "FILE_INTEGRITY_PASSED", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000" } }</pre>

File Submission Integrity Error:

Original Data File Submission File Name	123_456_20200204_CAIS_000123.json.bz2
Data Feedback File Name	123_456_20200204_CAIS_000123.v2.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 7, "submitterUsername": "caisimusr", "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "COMPLETED_INTEGRITY_ERROR", "receiptTimestamp": "20200204T152233.000045000", "completedTimestamp": "20200204T152721.023423000", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "COMPLETED_INTEGRITY_ERROR": "20200204T152721.023423000" }, "rejectionItems": [{ "rejectionID": 1127, "errorCode": 21007, "rejectionTimestamp": "20200204T152721.023423000" }] }</pre>

Original Identifiers File Submission File Name	123_456_20200204_TIDS_000123.json.bz2
Feedback File Name	123_456_20200204_TIDS_000123.v2.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 15, "submissionStatus": "COMPLETED_INTEGRITY_ERROR", "receiptTimestamp": "20200204T152233.000045", "completedTimestamp": "20200204T152721.023423", "statusHistory": { "FILE_ACKNOWLEDGED": "20191123T152233.000045", "COMPLETED_INTEGRITY_ERROR": "20200204T152721.023423" }, "rejectionItems": [{ "rejectionID": 50012, "errorCode": 21501, "rejectionTimestamp": "20200204T152721.023423" }] }</pre>

6.3. Data Ingestion

During Data Ingestion, records within the Data file are validated. Validations to ensure correct syntax and semantics associated with record length, field length, data type, non-null and reference data checks are performed. Validations are initiated by the record type of every record contained in the file. Ingestion feedback will be provided with reference to any and all records that have validation errors.

During the ingestion phase, each record will be checked for proper formatting (JSON field names and values) and data contents.

The following rules apply:

1. File Ingestion feedback will be generated for every submission file passing file integrity checks.
2. Any record within a Data File determined to be malformed or otherwise invalid will be individually rejected, and will not cause a rejection of the full file.
3. Any record within an Identifiers File determined to be malformed or otherwise invalid will be individually rejected, and will not cause a rejection of the full file.
4. When a record is readable and can be parsed, Ingestion validations, Database layer validations, and Inconsistency checking will occur for every field within the record.
5. One or more errors may be found within a record.
6. One or more inconsistencies may be found within a record, across multiple records within a file, or against other records accepted by CAT CAIS – including those submitted by another CAT Reporter firm.
7. Each error identified against a single FDID or Customer Record will be listed separately within the feedback file.
8. Each inconsistency identified against a single Customer Record will be listed in the feedback file against a single Inconsistency Event ID assigned to the Customer.
9. The original record reported to CAT CAIS will not be included in the feedback file. The feedback file will instead include the associated record IDs of the record having the error. If the error is on an FDID Record, the FDID will also be included in the feedback file.
10. Records that are not rejected during Ingestion will be imported into the CAT CAIS, even if one or more Inconsistencies are identified in the accepted record.
11. If an FDID Record passes validation, but contains one or more errors on associated LTIDs, the FDID Record will be rejected and no updates from the record will be stored into CAIS.
12. If an FDID Record passes validation, but contains one or more errors on associated Customer Records, the FDID Record will be rejected and no updates from the record will be stored into CAIS.

6.3.1. JSON Examples for Data Ingestion Feedback

Data File Submission Ingestion Success:

Original Data File Submission File Name	123_456_20200204_CAIS_000123.json.bz2
Data Feedback File Name	123_456_20200204_CAIS_000123.v3.feedback.json.bz2
Feedback File Contents	{ "version": "2.0.0", "submissionID": 7, "submitterUsername": "caisimusr", "catSubmitterID": 123,

	<pre> "catReporterCRD": 456, "submissionStatus": "COMPLETED_WITHOUT_REJECTIONS", "receiptTimestamp": "20200204T152233.000045000", "completedTimestamp": "20200204T152721.023423000", "receivedFDIDRecordCount": 100, "successfulFDIDRecordCount": 100, "receivedCorrectionActionCount": 0, "successfulCorrectionActionCount": 0, "receivedNaturalRecordCount": 50, "successfulNaturalRecordCount": 50, "receivedLegalEntityRecordCount": 60, "successfulLegalEntityRecordCount": 60, "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000", "RECORD_SCAN_COMPLETED": "20200204T152255.324392000", "COMPLETED_WITHOUT_REJECTIONS": "20200204T152721.023423000" } </pre>
--	--

Original Identifiers File Submission File Name	123_456_20200204_TIDS_000123.json.bz2
Identifiers Feedback File Name	123_456_20200204_TIDS_000123.v3.feedback.json.bz2
Feedback File Contents	<pre> { "version": "2.0.0", "submissionID": 15, "submissionStatus": "COMPLETED", "receivedTIDsCount": "7", "successfulTIDsCount": "7", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000", "COMPLETED": "20200204T152721.023423000" } } </pre>

Data File Submission Ingestion Error and Failed Correction:

Original Data File Submission File Name	123_456_20200204_CAIS_000123.json.bz2
Data Feedback File Name	123_456_20200204_CAIS_000123.v3.feedback.json.bz2
Feedback File Contents	<pre> { "version": "2.0.0", "submissionID": 7, "submitterUsername": "caisimusr", "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "COMPLETED_WITH_REJECTIONS", "receiptTimestamp": "20200204T152233.000045", "completedTimestamp": "20200204T152721.023423", "receivedFDIDRecordCount": 100, "successfulFDIDRecordCount": 99, "receivedNaturalRecordCount": 50, "successfulNaturalRecordCount": 49, "receivedLegalEntityRecordCount": 60, "successfulLegalEntityRecordCount": 60, "receivedCorrectionActionCount": 1, "successfulCorrectionActionCount": 0, "statusHistory": { </pre>

	<pre> "FILE_ACKNOWLEDGED": "2019200204T152233.000045", "FILE_INTEGRITY_PASSED": "20200204T152234.123245", "RECORD_SCAN_COMPLETED": "20200204T152255.324392", "COMPLETED_WITH_REJECTIONS": "20200204T152721.023423" }, "rejectionItems": [{ "rejectionID": 1127, "firmDesignatedID": "ABC123", "fdidRecordID": 4, "largeTraderRecordID": 2, "errorCode": 22012, "rejectionTimestamp": "20200204T152221.023423" }, { "rejectionID": 9985, "customerRecordID": 45, "errorCode": 22504, "rejectionTimestamp": "20200204T152221.023423" }], "failedCorrectionItems": [{ "rejectionID": 5000, "warningCode": 24002 }] } </pre>
--	--

Original Identifiers File Submission File Name	123_456_20200204_TIDS_000123.json.bz2
Identifiers Feedback File Name	123_456_20200204_TIDS_000123.v3.feedback.json.bz2
Feedback File Contents	<pre> { "version": "2.0.0", "submissionID": 15, "submissionStatus": "COMPLETED", "receivedTIDsCount": "7", "successfulTIDsCount": "6", "statusHistory": { "FILE_ACKNOWLEDGED": "20200204T152233.000045000", "FILE_INTEGRITY_PASSED": "20200204T152234.123245000", "COMPLETED": "20200204T152721.023423000" }, "rejectionItems": [{ "customerRecordID": 73, "errorCode": 24902, "rejectionTimestamp": "20200204T152221.023423" }] } </pre>

6.4. Submission Inconsistencies

Inconsistencies identified during CAT CAIS processing when comparing the data in the file to the data present in CAIS for the same CAT Customer will be included in the submission inconsistencies feedback

file. For every file pair submitted with a *version* of '2.0.0', a submission inconsistencies feedback file will be provided.

The following rules apply:

1. If the Data and Identifiers files reach an Integrity Error state, the Inconsistencies submission feedback will also note the Integrity Error and no inconsistencies feedback will be included.
2. Records that have a data validation error and are rejected will not be checked for Inconsistencies.

6.4.1. JSON Examples for Submission Inconsistencies Feedback

File Submission Integrity Success:

Original Data File Submission File Name	123_456_20200204_CAIS_000123.json.bz2
Submission Inconsistencies Feedback File Name	123_456_20200204_INCONSISTENCIAS_000123.v1.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 7, "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "COMPLETED", "inconsistencyEventCount": 2, "inconsistencyList": [{ "inconsistencyEventID": 12000, "customerRecordID": 15, "materialInconsistencies": { "30002": "1" } }, { "inconsistencyEventID": 12001, "customerRecordID": 99, "materialInconsistencies": { "30003": "1" } }] }</pre>

File Submission Integrity Error:

Original Data File Submission File Name	123_456_20200204_CAIS_000123.json.bz2
Submission Inconsistencies Feedback File Name	123_456_20200204_INCONSISTENCIAS_000123.v1.feedback.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "submissionID": 7, "catSubmitterID": 123, "catReporterCRD": 456, "submissionStatus": "COMPLETED_INTEGRITY_ERROR" }</pre>

6.5. Corrections

Errors found during CAT CAIS processing and found by CAT Reporters subsequent to transmission must be repaired. The reporting of Error Corrections is facilitated in CAT CAIS through submissions via SFTP and the CAT Reporter Portal - CAIS. Industry Member-initiated corrections of data that had been accepted in prior CAT CAIS submissions are acceptable at any time, and will be processed the same as any other update to the original record. The new data provided on the corrected record will update the currently stored record in CAT CAIS in place.

The following scenarios will be detailed below for how data can be corrected:

- Correction or Clearing of a CAT CAIS Submission File having a File Integrity Error
- Correction or Deletion of an FDID Record failing FDID format validation
- Correction or Deletion of a Customer Record failing TID format validation
- Correction of an FDID Record failing one or more Data Validation errors – other than FDID format validation
- Correction of a Customer Record failing one or more Data Validation errors – other than TID format validation

6.5.1. File Integrity Errors

A File Integrity Error resulting in the inability to process a particular Submission File can be corrected by submission of a new file having the same Submission File Name, with corrected data that passes File Integrity checks.

If a file is received having the same Submission File Name as a prior submission that did not have a File Integrity Error, the new submission file will be rejected as a File Integrity Warning, alerting the Industry Member that they have reused the same Submission File Name as a file that was previously accepted by CAT CAIS. The Industry Member does not have to take further action to correct for this submission file, however please be advised that the data included in the submission file will not be processed through Data Validation nor accepted into CAT CAIS.

6.5.2. Data Validation Errors

6.5.2.1. Missing or Invalid *firmDesignatedID* and Malformed TID Records

In order to support historical correction tracking and lineage of replacements, records failing Data Validation for a Missing or Invalid FDID (error code 22001), or a Malformed TID record (error code 22900), may be corrected through either of the following methods:

- Submission of a 'CORRECTION' action within the *correctionList* section of the Submission File, having a reference to the FDID or Customer Record ID that corrects for the prior failed record;
OR
- Submission of a 'DELETE' action within the *correctionList* section of the Submission File, indicating no record is required to be submitted in place of the prior record failing validation

In the CORRECTION scenario

- For an FDID - the replacing FDID Record must be included within the current Submission File and pass all data validation checks, or the replacing FDID Record must have been accepted by CAT CAIS in a prior submission.
- For a TID – the correcting Customer Record must be included in the current Submission File, as it is not permissible to include the correcting TID reference within the data submission file without the full Customer Record.

If the referenced correction record fails Data Validation for the format of its FDID or TID value, a separate rejection will be created against the replacement record, and the original rejection will remain open for correction. If the reference correction record passes Data Validation for format of the FDID or TID, the original rejection will be closed as corrected, even if the correcting record fails a separate Data Validation; however a new rejection will be recorded and tracked against the timeline for correction of the original error. Malformed LTIDs do not require 'CORRECTION' actions and can be repaired by resubmitting the full FDID Record, including all associations, with a valid Large Trader ID value.

6.5.2.2. Data Validation Errors

If a submission record fails Data Validation checks for any reasons other than the format of the FDID or TID value, rejections can be corrected by submitting the same FDID or TID, with corrected data. If the new submission fails for the same data validation, the prior rejection for the record will be considered repaired, and a new rejection will be created, however the new rejection will be tracked against the timeline for correction of the original error. If the new submission fails validation against a separate attribute, the original rejection will be closed as corrected, and a new rejection will be created for the separate attribute validation failure, however the new rejection will be tracked against the timeline for correction of the original error.

6.6. FDID Version Report

The FDID Version Report contains a list of FDIDs accepted by CAIS during the LTID Phase as version 1.0.0 records, but have not yet been upgraded to version 2.0.0 (Full CAIS) records. One report will be generated per CAT Reporter CRD. The report will be posted to the CAIS Reporter SFTP site in a JSON

file on a weekly basis, and a CSV download will be made available in the CAIS Reporter Portal UI 30 days prior to the Full CAIS compliance date for ad-hoc report generation.

CAT Reporter firms will be able to view all FDIDs accepted into CAIS by or on behalf of their firm. Submitter firms will be able to view only the FDIDs they have submitted to, and have been accepted by, CAIS for each CAT Reporter CRD for which they have an active reporting relationship.

FDID Version Reports created by CAT CAIS will be named using the following format:

```
<submitterID>_<reporterCRD>_<Date of Generation>_FDIDVERSION.<Format
Extension>.<Compression Type>
```

Example:

```
1234_5678_20220101_FDIDVERSION.json.bz2
```

In the event there are no version 1.0.0 records remaining for a given CAT Reporter, a sentinel file will be posted to the SFTP to indicate the scan ran successfully but returned no results. Sentinel files will be named using the following format:

```
<Date of Generation>_FDIDVERSION_PROCESSED.<Format
Extension>.<Compression Type>
```

Example: 20220101_FDIDVERSION_PROCESSED.json.bz2

6.6.1. JSON Examples for FDID Version Report

FDID Version Report file:

FDID Version Report File Name	1234_5678_20220101_FDIDVERSION.json.bz2
Feedback File Contents	<pre>{ "version": "2.0.0", "fileGenerationTimestamp": "20230731T223233.000045", "reporterCRD": 456, "fdidV1Count": 4, "fdidV1List": ["abc", "xyz", "alb2c3", "lmnop"] }</pre>

FDID Version Report sentinel file:

FDID Version Report File Name	20220101_FDIDVERSION_PROCESSED.json.bz2
-------------------------------	---

Feedback File Contents	{"response":"FDID version report processed"}
------------------------	--

7. Nightly Data Inconsistencies Feedback

Each night the CAIS database will be scanned for data inconsistencies present on Active Customer Records within the system. Any Inconsistencies that are identified within CAIS data for Active Customers triggered by another submitter now initiate a window for correction/confirmation for any Industry Member notified of the inconsistency.

The following rules apply to Data Inconsistencies Feedback Files:

1. An Inconsistencies Feedback file will be generated for each CAT Reporter Firm each night, even if they have no Inconsistencies open against their submitted Customer Record data. In the event there are no Inconsistencies identified, a sentinel file will be posted to indicate the operation ran successfully but did not produce any results.
2. The Inconsistencies Feedback file will be posted to the inconsistencies feedback directory of the CAT Reporter Firm whose data was evaluated for inconsistencies.
3. Material Inconsistencies will have a deadline for confirmation or correction, which will be included in the feedback file.
4. If a CAT Reporter Firm attempts to confirm or correct for a Material Inconsistency, but the submission record is rejected or the changes trigger a new Material Inconsistency for the same Customer Record, the original inconsistency deadline will remain.
5. Minor Inconsistencies will be noted within the data inconsistencies feedback file one time, after which they will no longer be included in the feedback file until another Minor Inconsistency is identified for the Customer Record.
6. Minor Inconsistencies identified within the submission of a CAT Reporter Firm will be noted in the Submission Feedback file, and will also be reported one time within the data inconsistencies feedback file, after which they will no longer be included until another Minor Inconsistency is identified for the Customer.
7. The CAT Reporter Firm is not required to take action on Minor Inconsistencies; they are provided for information purposes only.
8. In the event a Material Inconsistency is identified against a Customer Record due to conflicting data from another CAT Reporter Firm for the same Customer, and is closed following the resubmission of the Customer Record with the *updateNotification* attribute, it will not result in a new Material Inconsistency against the same Customer Record unless a CAT Reporter Firm submits the same Customer with data that introduces a new Material Inconsistency.
9. The nightly scan will only consider Customer Records having at least one active association to an FDID (i.e., no *roleEndDate* set or *roleEndDate* is set later than the date of the scan). Inactive Customer Records (i.e., those having no active associations to FDID) will not be included in the nightly scan.

7.1.1. Data Inconsistencies Feedback File Names

1. Inconsistencies files will be named using the following format:

<CAT Submitter ID>_<CAT Reporter CRD>_<File Generation Date>_<File Kind>.<Format Extension>.<Compression Extension>

For example: 123_456_20200101_INCONSISTENCIES.json.bz2

2. Sentinel inconsistencies files will be named using the following format:

<File Generation Date>_INCONSISTENCIES_PROCESSED.<Format Extension>.<Compression Extension>

For example: 20200101_INCONSISTENCIES_PROCESSED.json.bz2

3. The values assigned within the format of a file name include:

Table 20: Elements of an Inconsistencies Feedback File Name

Field Name	Data Type	Description	Include Key
CAT Submitter ID	Unsigned	CAT Reporting Agent that submitted the file to CAT.	R
CAT Reporter CRD	Unsigned	The CRD assigned identifier of the Industry Member within which the inconsistencies were identified.	R
File Generation Date	Date	The date the file was generated or reported. Used to guarantee uniqueness of a file across dates.	R
File Kind	Alphanumeric (20)	Set to 'INCONSISTENCIES'.	R
Format Extension	Alphanumeric (4)	Represents the format of the data submission. JSON formatted inconsistency feedback files must be 'json'.	R
Compression Extension	Alphanumeric (3)	Applicable to Data Files. Set to 'bz2'.	R

Table 21: Elements of an Inconsistency Feedback file

Field Name	Data Type	JSON Object	Include Key	Description
version	Text(10)	Main	R	The schema version of the feedback file used for providing the response. Initial <i>version</i> will be 2.0.0.
fileGenerationTimestamp	Timestamp	Main	R	Time at which the Inconsistency File was generated.
reporterCRD	Unsigned	Main	R	The CRD of the CAT Reporter Firm for whom the Inconsistency Feedback file was generated.

Field Name	Data Type	JSON Object	Include Key	Description
inconsistencyEventCount	Unsigned	Main	R	The count of the Inconsistency Events reported within the Inconsistency Feedback file.
inconsistencyList	Multi-Dimensional Array	Main	C	The list of Inconsistencies identified across the Active Customer Records accepted into CAIS from this CAT Reporter firm.
inconsistencyEventID	Unsigned	Inconsistency Record ID	R	The unique Inconsistency Event ID assigned to the CAT Reporter Firm for the specific Customer – by TID – having one or more Inconsistencies. This ID is used because the CAT NMS Plan-Defined PII – including TID – of the Customer cannot be returned to the CAT Reporter after it is submitted to CAT.
inconsistencyDeadline	Date (8)	Inconsistency Record	C	Deadline for repair or confirmation of data inconsistency event. Only provided if at least one Material Inconsistency exists for Customer.
lastSubmittedFileName	Text(100)	Inconsistency Record ID	R	Name of the file in which the Inconsistent Customer was last submitted into CAIS for the CAT Reporter to use in determining what data was included in the Customer submission.
lastSubmittedRecordID	Array [Unsigned]	Inconsistency Record	R	Customer Record ID under which the Inconsistent Customer was last submitted into CAIS for the CAT Reporter to use in determining what data was included in the Customer submission.
materialInconsistencies	Name/Value Pair	Inconsistency Record	C	Includes the list of Material Inconsistency Codes and Count of Conflicting CAT Report Firms of the identified inconsistencies for the Customer Record.
minorInconsistencies	Name/Value Pair	Inconsistency Record	C	Includes the list of Minor Inconsistency Codes and Count of Conflicting CAT Report Firms of the identified inconsistencies for the Customer Record. Minor Inconsistencies do not require repair or confirmation.

7.1.2. JSON Examples for Data Inconsistencies Feedback

The following JSON example demonstrates the structure of a Data Inconsistencies Feedback file.

```
{
  "version": "2.0.0",
  "fileGenerationTimestamp": "20230731T223233.000045",
  "reporterCRD": 999,
  "inconsistencyEventCount": 4,
  "inconsistencyList": [
    {
      "inconsistencyEventID": 10125,
      "inconsistencyDeadline": "20230803",
      "lastSubmittedFileName": "999_999_20230724_CAIS_000123.json.bz2",
      "lastSubmittedRecordID": "15",
      "materialInconsistencies": {
```

```

"30002": "1",
"30003": "4"
  }
},
{
  "inconsistencyEventID": 954,
  "inconsistencyDeadline": "20230802",
  "lastSubmittedFileName": "123_999_20230601_CAIS_000003.json.bz2",
  "lastSubmittedRecordID": "999",
  "materialInconsistencies": {
"30002": "15"
  }
},
{
  "inconsistencyEventID": 17,
  "lastSubmittedFileName": "123_999_20230705_CAIS_000001.json.bz2",
  "lastSubmittedRecordID": "1"
},
{
  "inconsistencyEventID": 10297,
  "lastSubmittedFileName": "999_999_20230724_CAIS_000001.json.bz2",
  "lastSubmittedRecordID": "33",
  "materialInconsistencies": {
"30002": "8"
  }
}
]
}

```

8. Testing

CAT will provide an environment for testing that mirrors the current functionality of the CAT CAIS production environment, as well as functionality for the next release version of the CAT CAIS environment when available. The CAT CAIS testing environment will automatically determine which specification version Industry Members and CAT Reporting Agents are using for submissions. If error reporting formats change, Industry Members and CAT Reporting Agents will receive feedback in the current and new specification via SFTP, as well as have access to current/new CAT Reporter Portal - CAIS URLs for specification changes that impact the CAT Reporter Portal - CAIS. Current/new connectivity changes will also be supported concurrently.

Industry Members and CAT Reporting Agents must test their submissions using the testing environment before they begin submitting to the production environment.

The test environment is available 24 hours a day, 6 days a week. Refer to the CAT website for contact information and hours of operation for support.

Industry Members and CAT Reporting Agents connect to the test environment in the same manner they would connect to the production environment. However, for the connection to the test environment, one or more alternate IP addresses or URLs may be used.

Testing does not relieve an Industry Member of its responsibilities to submit production data to the CAT System.

9. Additional Information

9.1. Public Website

The CAT public website, www.catnmsplan.com, is available via the public internet, and is hosted outside the CAT secure network. The CAT public website provides information about CAT, including links to SEC Rule 613, Participant and Industry Member Technical Specifications, FAQs, training materials, and CAT Helpdesk contact information.

Web announcements will be made available on the public website. You can also [subscribe](#) to receive email notifications regarding changes to the website and system status notifications. These announcements are used to post information related to the operation of CAT.

Contact help@finracat.com for any questions and/or feedback regarding this document.

Appendices

Appendix A: Change Release Management Process

Following publication of version 1.0, changes to this Industry Member Technical Specification will be released as follows:

- All proposed amendments to the Technical Specifications will be made in accordance with the CAT NMS Plan, including being approved or deemed approved (as applicable) by the Consolidated Audit Trail, LLC Operating Committee.
- Prior to the go-live date for any system changes set forth in the Technical Specifications:
 - ◆ A new Technical Specifications will be posted to the CAT public website, www.catnmsplan.com.
 - ◆ A notice will be posted on the CAT NMS Plan public website with a summary of changes, the go-live date for the changes and links to relevant information.
 - ◆ One or more email alerts will be sent to the email address(es) on file for the CAT Reporters with a summary of changes set forth in the revised Technical Specifications, the go-live date for the changes and links to relevant information.
 - ◆ Industry Members will be permitted to perform testing of the revised Technical Specifications in advance of the go-live date for the changes. Information on such testing will be set forth in the notices and alerts described above.
 - ◆ As the go-live date approaches, Industry Members will be able to conduct testing and will receive support from the Plan Processor to prepare for production reporting using the revised Technical Specifications format. The revised Technical Specifications will include a summary list of changes as well as a table listing the specific areas of the document where the changes have been made.

Appendix B: Error Codes

This section defines the error and warning codes generated by CAT CAIS. Each code is defined to include the reason for the error or warning, including the associated fields. Warnings are not subject to further processing and Industry Members are not required to take any action on them. Codes are assigned in ranges to represent similar types of errors within the same range, related by validation type and/or by linkage type. Codes are organized by the CAT Processing stages including:

- File Integrity
- Data Ingestion
- Data Inconsistency Checking

B.1 File Integrity Errors

The table below contains error messages that are associated with file integrity. Errors are associated with files, filenames, and metadata within submission files such as record count.

Table 22: Data File Integrity Errors

Error Code	Error Code Description	Explanation	Error/Warning
21001	Duplicate File	A file with the same base name was previously accepted by CAT.	Error
21002	Missing or Invalid CAT Submitter ID	CAT Submitter ID is missing or invalid.	Error
21003	Missing or Invalid CAT Reporter CRD	CAT Reporter CRD is missing or is not a valid Market Participant for the Generation Date.	Error
21004	Missing or Invalid File Generation Date	File Generation Date is missing or is not a valid date.	Error
21005	File exceeds the supported size limit	File size exceeds the maximum uncompressed size of 100 GB via SFTP and 1GB via the CAT Reporter Portal - CAIS.	Error
21006	Unauthorized CAT Submitter ID	CAT Submitter ID has not been authorized to submit for the CAT Reporter CRD. Verify that the CAT Submitter ID and CAT Reporter CRD in the file name have a transmitting relationship.	Error
21007	Missing or Invalid FDID Record count	The FDID Record count in the submission file is missing or is a negative number, does not match the count of FDID Records within the file, or is a non-zero number for DEL file.	Error
21008	Missing or Invalid File Version	File Version in submission file is missing or invalid.	Error
21009	File exceeds maximum records allowed for	A single data file uploaded via the CAIS Reporter Portal must not contain more than 100,000 FDID	Error

Error Code	Error Code Description	Explanation	Error/Warning
	Web upload	Records.	
21010	Invalid CAIS File Name	CAIS submission file names must follow the defined format. Submission files uploaded via CAIS Reporter Portal UI or SFTP may not use a Group value of 'caisweb'.	Error
21011	CAIS file not Readable	CAIS submission file format is not readable as it is not in a valid JSON format, contains an incorrect delimiter, or does not follow the prescribed schema.	Error
21012	Unknown Attribute Name	The file contains a file level attribute that is not known under the reported specification <i>version</i> .	Error
21013	CAIS File cannot be Uncompressed	The CAIS submission file was not properly compressed and cannot be processed.	Error
21014	Paired Identifiers file not received	The paired Identifiers file for the data file was not received in time, or had a file integrity error.	Error
21016	Missing or Invalid Natural Person Customer Record Count	The Natural Person Customer Record count in the submission file is missing or is a negative number, or does not match the count of Natural Person Customer Records within the file.	Error
21017	Missing or Invalid Legal Entity Customer Record Count	The Legal Entity Customer Record count in the submission file is missing or is a negative number, or does not match the count of Legal Entity Customer Records within the file.	Error
21018	Invalid <i>correspondentCRD</i>	When populated, <i>correspondentCRD</i> must be a valid CRD value.	Error
21019	Duplicate occurrences of an attribute exist	An attribute can only appear at most one time per JSON object.	Error
21020	Automated transfer in progress	When an automated mass transfer of FDIDs (as detailed in Section 3.3.1) is in progress, neither the Transferring Firm nor the Receiving Firm can submit files to CAIS.	Error
21021	Reset in progress	When a CAT Reporter has requested their data be reset and the reset operation is in progress, the CAT Reporter nor any of its Submitters can submit files to CAIS.	Error

Table 23: Identifiers File Integrity Errors

Error Code	Error Code Description	Explanation	Error/Warning
21501	Duplicate File	A file with the same base name was previously accepted by CAT.	Error
21504	Missing or Invalid File Generation Date	File Generation Date is missing or is not a valid date.	Error
21505	File exceeds the supported size limit	File size exceeds the maximum uncompressed size of 100 GB via SFTP and 1GB via the CAT Reporter Portal - CAIS.	Error

Error Code	Error Code Description	Explanation	Error/Warning
21507	Missing or Invalid TID record count	The TID record count in the submission file is missing or is a negative number, or does not match the count of TID records within the file.	Error
21508	Missing or Invalid File Version	File Version in submission file is missing or invalid.	Error
21509	File exceeds maximum records allowed for Web upload	A single Identifier file uploaded via the CAIS Reporter Portal must not contain more than 100,000 TID records.	Error
21510	Invalid CAIS TIDs File Name	CAIS Identifier file names must follow the defined format.	Error
21511	CAIS file not Readable	CAIS Identifier file format is not readable as it is not in a valid JSON format or contains an incorrect delimiter.	Error
21512	Unknown Attribute Name	The file contains a file level attribute that is not known under the reported specification <i>version</i> .	Error
21513	CAIS File cannot be Uncompressed	The CAIS Identifier file was not properly compressed and cannot be processed.	Error
21514	Paired Data file not received	The paired Data file for the Identifiers file was not received in time, or had a file integrity error.	Error
21516	Duplicate occurrences of an attribute exist	An attribute can only appear at most one time per JSON object.	Error
21517	Reserved		
21518	Reserved		
21519	Reserved		

B.2 Data Validation Errors

The table below contains error messages that are associated with Data Ingestion. Error codes are associated with specific fields within a submission record.

Table 24: Data Validation Errors

Error Code	Error Code Description	Explanation	Warning/Error
22001	Missing or Invalid <i>firmDesignatedID</i>	<i>firmDesignatedID</i> must be present and populated for each Account record within the file. Affected record will not be processed for further validation checks.	Error
22002	Duplicated <i>firmDesignatedID</i>	Each <i>firmDesignatedID</i> must be present in the submission file only once. Affected records will not be processed for further validation checks.	Error
22003	Missing or Invalid <i>fdidRecordID</i>	<i>fdidRecordID</i> must be present and populated for each Account record within the file. Affected record will not be processed for further validation checks.	Error

Error Code	Error Code Description	Explanation	Warning/Error
22004	Duplicated <i>fdidRecordID</i>	Each <i>fdidRecordID</i> must be present in the submission file only once. Affected records will not be processed for further validation checks.	Error
22005	Missing or Invalid <i>fdidType</i>	<i>fdidType</i> must be present and populated with one of the allowable values.	Error
22006	Duplicated <i>largeTraderID</i>	Each <i>largeTraderID</i> must be present only once for a single FDID Record.	Error
22007	Missing or Invalid format of <i>fdidDate</i>	<i>fdidDate</i> must be populated in the correct format. Affected record will not be processed for further validation checks.	Error
22008	Missing or Invalid <i>fdidEndDate</i>	When populated, <i>fdidEndDate</i> must be in the correct format. Must be populated if <i>fdidEndReason</i> is populated.	Error
22009	<i>fdidEndDate</i> set prior to <i>fdidDate</i>	When populated, <i>fdidEndDate</i> must be equal to or later than <i>fdidDate</i> .	Error
22010	Missing or Invalid <i>fdidEndReason</i>	When populated, <i>fdidEndReason</i> must use one of the allowable values. Must be populated if <i>fdidEndDate</i> is populated.	Error
22011	Missing or Invalid <i>replacedByFDID</i>	When populated, <i>replacedByFDID</i> must be in the correct format for an FDID. Must be populated if <i>fdidEndReason</i> is set to 'REPLACED'.	Error
22012	Missing or Invalid format of <i>largeTraderID</i>	When populated, <i>largeTraderID</i> must be in the correct format for either a Large Trader ID or an Unidentified Large Trader ID. Must be populated for each Large Trader record. Affected record will not be processed for further validation checks.	Error
22013	Missing or Invalid <i>largeTraderRecordID</i>	<i>largeTraderRecordID</i> must be present and populated for each Large Trader record within the file. Affected record will not be processed for further validation checks.	Error
22014	Duplicated <i>largeTraderRecordID</i>	Each <i>largeTraderRecordID</i> reported for a single FDID Record within the file must be present only once.	Error
22015	Missing or Invalid <i>ltidEffectiveDate</i>	<i>ltidEffectiveDate</i> must be populated in the correct format.	Error
22016	Missing or Invalid <i>ltidEndDate</i>	When populated, <i>ltidEndDate</i> must be in the correct format. Must be populated if <i>ltidEndReason</i> is populated.	Error
22017	Missing or Invalid <i>ltidEndReason</i>	When populated, <i>ltidEndReason</i> must use one of the allowable values. Must be populated if <i>ltidEndDate</i> is populated.	Error
22018	Unknown Attribute Name	The record contains an attribute that is not known under the reported specification <i>version</i> .	Error
22024	<i>replacedByFDID</i> must not be equal to <i>firmDesignatedID</i>	When populated, <i>replacedByFDID</i> must be a different value than the <i>firmDesignatedID</i> .	Error
22028	<i>ltidEndDate</i> set prior to <i>ltidEffectiveDate</i>	<i>ltidEndDate</i> must not be set to a value prior to the <i>ltidEffectiveDate</i>	Error
22034	Data type violation - FDID	FDID Record contains one or more attribute values	Error

Error Code	Error Code Description	Explanation	Warning/Error
		that violate the data type for the attribute.	
22035	Improper Use of Address Lines	<i>addrLine3</i> must not be present and populated unless <i>addrLine2</i> is also present and populated. <i>addrLine4</i> must not be present and populated unless <i>addrLine2</i> and <i>addrLine3</i> are both present and populated.	Error
22036	Missing or Invalid <i>city</i>	<i>city</i> must be present and populated with a valid value for each Address Record present for each FDID Record within the file.	Error
22037	Missing or Invalid <i>regionCode</i>	<i>regionCode</i> must be present and populated for each Address Record present for each FDID Record within the file if the <i>countryCode</i> included has a corresponding list of regions in Appendix E.	Error
22038	Missing or Invalid <i>countryCode</i>	<i>countryCode</i> must be present and populated for each Address Record present for each FDID Record within the file.	Error
22039	Missing or Invalid format of <i>postalCode</i>	<i>postalCode</i> must be present and populated for each Address Record present for each FDID Record within the file if the <i>countryCode</i> included has a corresponding Postal Code in Appendix E.	Error
22040	Missing <i>fdidCustomerList</i>	<i>fdidCustomerList</i> must be present for each FDID Record within the file, unless the FDID is being ended in the submission.	Error
22041	Missing or Invalid <i>customerRecordID</i> within <i>fdidCustomerList</i>	<i>customerRecordID</i> must be present and populated for each record within the <i>fdidCustomerList</i> object, and reference a <i>customerRecordID</i> also present in either the <i>naturalPersonCustomerList</i> or <i>legalEntityCustomerList</i> . Affected record will not be processed for further validation checks.	Error
22042	Multiple active roles for Customer within <i>fdidCustomerList</i>	Each Customer, as reconciled to a single <i>tidValue</i> , present in the <i>fdidCustomerList</i> of a single FDID must have exactly one role without a set <i>roleEndDate</i> . The dates on which a customer's <i>role</i> on an FDID are active cannot overlap with other roles for the same Customer.	Error
22043	Missing or Invalid <i>role</i>	<i>role</i> must be present and populated for each record within the <i>fdidCustomerList</i> object.	Error
22044	Missing or Invalid <i>roleStartDate</i>	<i>roleStartDate</i> must be present and populated for each record within the <i>fdidCustomerList</i> object.	Error
22045	Missing or Invalid <i>roleEndDate</i>	When populated, <i>roleEndDate</i> must be in the correct format. Must be populated if <i>roleEndReason</i> is populated.	Error
22046	<i>roleEndDate</i> set prior to <i>roleStartDate</i>	When populated, <i>roleEndDate</i> must be equal to or later than <i>roleStartDate</i> .	Error
22047	Missing or Invalid <i>roleEndReason</i>	When populated, <i>roleEndReason</i> must use one of the allowable values. Must be populated if <i>roleEndDate</i> is populated.	Error
22048	Associated Customer Record rejected	The FDID Record is rejected because an associated Customer Record was rejected.	Error

Error Code	Error Code Description	Explanation	Warning/Error
22049	Missing or Invalid <i>accountType</i>	<i>accountType</i> must be present and populated with only valid values for each FDID Record within the file.	Error
22050	Missing or Invalid <i>accountName</i>	<i>accountName</i> must be present and populated for each FDID Record within the file.	Error
22052	Invalid <i>branchOfficeCRD</i>	When populated, <i>branchOfficeCRD</i> must be a valid value.	Error
22053	Reserved	Reserved for future use	
22054	Missing or Invalid <i>priorCATReporterCRD</i>	<i>priorCATReporterCRD</i> must be present and populated when <i>priorCATReporterFDID</i> value is set. When populated, <i>priorCATReporterCRD</i> must be a valid CAT Reporter CRD value.	Error
22055	Missing ADDRESS1 type Address Record	An Address Record of type 'ADDRESS1' must be present for each FDID Record within the file.	Error
22056	Missing <i>addrLine1</i>	Each Address Record for each FDID Record within the file must have a populated <i>addrLine1</i> .	Error
22057	Missing, duplicated, or invalid <i>addrType</i>	<i>addrType</i> must be present and populated with a valid value for each Address Record present for each FDID Record within the file.	Error
22058	Missing or Invalid <i>priorCATReporterFDID</i>	<i>priorCATReporterFDID</i> must be present and populated when <i>priorCATReporterCRD</i> value is set. When populated, <i>priorCATReporterFDID</i> must be a valid <i>firmDesignatedID</i> value.	Error
22059	Improper Use of Address Type	'ADDRESS2' must not be present and populated unless ADDRESS1 is also present and populated. 'ADDRESS3' must not be present and populated unless 'ADDRESS1' and 'ADDRESS2' are both present and populated. 'ADDRESS4' must not be present and populated unless 'ADDRESS1', 'ADDRESS2', and 'ADDRESS3' are present and populated.	Error
22060	Invalid format of Address Line	When populated, an Address Line must be a valid value. This includes attributes <i>addrLine1</i> , <i>addrLine2</i> , <i>addrLine3</i> and/or <i>addrLine4</i> .	Error
22061	Missing <i>hasDiscretion</i>	Must be populated if <i>role</i> is set to 'AUTHREP' or 'AUTH3RD'.	Error
22064	Invalid <i>clearingBrokerID</i>	When populated, <i>clearingBrokerID</i> must be a valid value.	Error
22065	Invalid <i>registeredRepCRD</i>	When populated, <i>registeredRepCRD</i> must be a valid value.	Error
22066	<i>roleStartDate</i> set prior to <i>fdidDate</i>	The <i>roleStartDate</i> for all Customers associated to a given FDID must not be set prior to the <i>fdidDate</i> for that FDID.	Error
22067	<i>roleEndDate</i> set later than <i>fdidEndDate</i>	The <i>roleEndDate</i> for all Customers associated to a given FDID must not be set later than the <i>fdidEndDate</i> for that FDID.	Error
22068	No active Customer associations	Each FDID must have at least one association with no <i>roleEndDate</i> set earlier than the <i>fdidEndDate</i> .	Error

Error Code	Error Code Description	Explanation	Warning/Error
22069	Improper combination of <i>accountType</i> and <i>fdidType</i> values	The <i>accountType</i> values of 'ENTITYID' and 'RELATIONSHIP' are only to be used when the <i>fdidType</i> is of the same value.	Error
22070	FDID previously submitted in v2.0.0 file	The FDID was previously submitted in a Full CAIS Phase (<i>version</i> '2.0.0') file, and cannot be submitted again in an LTID Phase (<i>version</i> '1.0.0') file.	Error
22071	No Customer association with trading capabilities	Each FDID must have at least one CAT Customer association with a <i>role</i> of 'TRDHOLDER', or a <i>role</i> of 'AUTHREP' or 'AUTH3RD' where <i>hasDiscretion</i> is true.	Error
22072	Missing or invalid <i>authTraderNameID</i>	<i>authTraderNameID</i> must be present and populated for each record within the <i>authTraderNamesList</i> object of each FDID Record within the file.	Error
22073	Duplicated <i>authTraderNameID</i>	Each <i>authTraderNameID</i> must be present within the <i>authTraderNamesList</i> only once. Affected records will not be processed for further validation checks.	Error
22074	Missing or invalid <i>authTraderName</i>	<i>authTraderName</i> must be present and populated with a valid value for each record within the <i>authTraderNamesList</i> object of each FDID Record within the file.	Error
22075	Missing or Invalid <i>DVPCustodianID</i>	<i>DVPCustodianID</i> must be populated for every FDID Record where <i>accountType</i> includes the value 'DVP/RVP'.	Error
22501	Missing or Invalid <i>customerRecordID</i>	<i>customerRecordID</i> must be present and populated for each Customer Record within the file. Affected record will not be processed for further validation checks.	Error
22502	Duplicated <i>customerRecordID</i>	Each <i>customerRecordID</i> must be present in the submission file only once. Affected records will not be processed for further validation checks.	Error
22503	Invalid use of <i>updateNotification</i>	<i>updateNotification</i> must only be used for a Customer Record that has previously been submitted by an Industry Member.	Error
22504	Missing or Invalid format of <i>ein</i>	<i>ein</i> must be present and populated for each Legal Entity Customer Record within the file if the <i>tidType</i> is 'EIN'. Must be present in the appropriate format.	Error
22507	Missing or Invalid <i>firstName</i>	<i>firstName</i> must be present and populated with a valid value for each Natural Person Customer Record within the file.	Error
22508	Missing or Invalid <i>lastName</i>	<i>lastName</i> must be present and populated with a valid value for each Natural Person Customer Record within the file.	Error
22509	Invalid <i>nameSuffix</i>	<i>nameSuffix</i> must be populated with one of the allowable values.	Error
22510	Missing or Invalid format of <i>yearOfBirth</i>	<i>yearOfBirth</i> must be populated in the correct format for each Natural Person Customer Record within the file.	Error
22514	Missing ADDRESS1 type Address Record	When an Address Record is included for a Customer Record, an 'ADDRESS1' type Address Record must always be present.	Error

Error Code	Error Code Description	Explanation	Warning/Error
22515	Missing <i>addrLine1</i>	Each Address Record for each Customer Record within the file must have a populated <i>addrLine1</i> .	Error
22516	Missing or invalid <i>addrType</i>	<i>addrType</i> must be present and populated with a valid value for each Address Record present for each Customer Record within the file.	Error
22517	Improper Use of Address Lines	<i>addrLine3</i> must not be present and populated unless <i>addrLine2</i> is also present and populated. <i>addrLine4</i> must not be present and populated unless <i>addrLine2</i> and <i>addrLine3</i> are both present and populated.	Error
22518	Missing or Invalid <i>city</i>	<i>city</i> must be present and populated with a valid value for each Address Record present for each Customer Record within the file.	Error
22519	Missing or Invalid <i>regionCode</i>	<i>regionCode</i> must be present and populated for each Address Record present for each Customer Record within the file if the <i>countryCode</i> included has a corresponding list of regions in Appendix E.	Error
22520	Missing or Invalid <i>countryCode</i>	<i>countryCode</i> must be present and populated for each Address Record present for each Customer Record within the file.	Error
22521	Missing or Invalid format of <i>postalCode</i>	<i>postalCode</i> must be present and populated in the valid format for each Address Record present for each Customer Record within the file if the <i>countryCode</i> included has a corresponding Postal Code in Appendix E.	Error
22522	Data type violation - Customer	Customer Record contains one or more attribute values that violate the data type for the attribute.	Error
22523	Customer Record rejected because an associated FDID was rejected	The Customer Record is rejected because an FDID in the file with association to the Customer Record has been rejected.	Error
22524	Missing or Invalid <i>customerType</i>	<i>customerType</i> must be present and populated with a valid value for each Customer Record within the file.	Error
22525	Customer Record has an open Material Inconsistency and <i>updateNotification</i> was not set as true	The Customer Record has an open Material Inconsistency requiring repair, however the submission does not include the <i>updateNotification</i> attribute was either not included in the submission, or was not set as 'true'.	Error
22526	<i>customerRecordID</i> not present in paired Identifiers file	Each <i>customerRecordID</i> present in the data file must have a corresponding entry in the paired Identifiers submission file. The <i>customerRecordID</i> in both the TIDs File and the CAIS Data File must be valid and well-formatted.	Error
22527	Improper Use of Address Type	'ADDRESS2' must not be present and populated unless ADDRESS1 is also present and populated. 'ADDRESS3' must not be present and populated unless 'ADDRESS1' and 'ADDRESS2' are both present and populated. 'ADDRESS4' must not be present and populated unless 'ADDRESS1', 'ADDRESS2', and 'ADDRESS3' are present and	Error

Error Code	Error Code Description	Explanation	Warning/ Error
		populated.	
22528	Invalid format of Address Line	When populated, an Address Line must be a valid value. This includes attributes <i>addrLine1</i> , <i>addrLine2</i> , <i>addrLine3</i> and/or <i>addrLine4</i> .	Error
22529	Customer Record rejected because another version of the Customer was rejected	The Customer Record is rejected because another record for the same CAT Customer, as reconciled to a single TID value, was rejected within the file.	Error
22530	Missing or Invalid <i>legalName</i>	<i>legalName</i> must be present and populated with a valid value for each Legal Entity Customer Record within the file.	Error
22531	Missing or Invalid <i>lei</i>	When populated, <i>lei</i> must be a valid value. Must be populated if Input Identifier used to generate the Transformed Identifier of the Customer was 'LEI'.	Error
22532	Invalid <i>doingBusinessAs</i> name	When populated, <i>doingBusinessAs</i> must be populated with a valid value for each Natural Person Customer Record.	Error
22533	Multiple instances of Customer with differing data	Multiple records for a single Customer (as reconciled to a single TID) within the Data file must have the same EIN, Year of birth, and/or Customer Record Type (Natural Person or Legal Entity) values.	Error
22534	Natural Person CAT Customer reported with improper <i>foreignTIDType</i>	Natural Person CAT Customer Records must not be reported with a <i>foreignTIDType</i> of 'LEI'.	Error
22535	Legal Entity CAT Customer reported with improper <i>foreignTIDType</i>	Legal Entity CAT Customer Records must not be reported with a <i>foreignTIDType</i> of 'DRIVERLICENSE', 'PASSPORT' or 'PERMANENT'.	Error
22536	Reserved	Reserved for future use	
22537	Reserved	Reserved for future use	
22538	Reserved	Reserved for future use	
22539	CAT Customer Record has an unresolved inconsistency	The CAT Customer Record was rejected because it has an outstanding Material Inconsistency.	Error
22540	Invalid <i>middleName</i>	When populated, <i>middleName</i> must be populated with a valid value for each Natural Person CAT Customer Record.	Error
22541	Legal Entity CAT Customer reported with improper <i>tidType</i>	Legal Entity CAT Customer Records must not be reported with a <i>tidType</i> of 'SSN/ITIN'.	Error
22542	Natural Person CAT Customer reported with improper <i>tidType</i>	Natural Person CAT Customer Records must not be reported with a <i>tidType</i> of 'EIN'.	Error
22900	Malformed TID Record – CAT Customer Record not processed	The entry for this CAT Customer in the Transformed Identifiers file was malformed and could not be processed.	Error
22914	Paired TID Record failed validation– CAT Customer Record not	The paired entry for this CAT Customer in the Transformed Identifiers file failed validation and was not processed.	Error

Error Code	Error Code Description	Explanation	Warning/Error
	processed		
23999	Unhandled Exception	An unknown error occurred during processing.	Error

B.3 Data Layer Validation Error Codes

The table below contains error messages that are associated when validating data contained in a submission record against data previously accepted into CAT CAIS for the same submission record. Error codes are associated with specific fields within a submission record.

Table 25: Data Layer Validation Errors

Error Code	Error Code Description	Explanation	Warning/Error
23004	<i>replacedByFDID</i> set to an unknown value	When populated, the <i>replacedByFDID</i> must reference an FDID that is accepted without error in the current submission, or an FDID that was previously accepted by CAIS.	Error
23005	<i>fdidEndDate</i> set prior to <i>fdidDate</i> of replacing record	When <i>fdidEndReason</i> is set as 'REPLACED', the <i>fdidEndDate</i> must not be set prior to the <i>fdidDate</i> of the FDID set as the <i>replacedByFDID</i> .	Error

B.4 Warning Error Codes

The table below contains Warning messages that are associated with Data Ingestion and included in the Feedback file. Warning codes are associated with specific fields within a submission record. Warnings are not required to be repaired.

Table 26: CAT CAIS Data File Validation Warnings

Error Code	Error Code Description	Explanation	Warning/Error
24001	Missing or Invalid <i>rejectionID</i>	When populated, the <i>rejectionID</i> must be a known <i>rejectionID</i> for the <i>catReporterID</i> whose data is included in the submission file.	Warning
24002	Missing or Invalid <i>correctionAction</i>	When populated, <i>correctionAction</i> must use one of the allowable values. Must be populated if <i>rejectionID</i> is populated.	Warning
24003	Missing or Invalid <i>correctingFirmDesignatedID</i>	When populated, <i>correctingFirmDesignatedID</i> must reference a <i>firmDesignatedID</i> that is included in the current submission file or was accepted by CAT CAIS in a prior submission.	Warning

Error Code	Error Code Description	Explanation	Warning/Error
24005	Improper correction attempt	The <i>rejectionID</i> included in the correction attempt is for an improper error code. It is only acceptable to submit a correction against rejections for error codes 22001 and 22900.	Warning
24006	Unknown Attribute Name	The record contains an attribute that is not known under the reported specification <i>version</i> .	Warning
24007	Missing or Invalid <i>correctingCustomerRecordID</i>	When populated, <i>correctingCustomerRecordID</i> must reference a <i>customerRecordID</i> that is included in the current submission file.	Warning

Table 27: CAT CAIS Identifiers File Validation Warnings

Error Code	Error Code Description	Explanation	Warning/Error	Corresponding Data Validation Error Code
24901	Malformed TID Record - Missing or invalid <i>customerRecordID</i>	<i>customerRecordID</i> must be present and populated for each TID record within the file.	Warning	22526
24902	Malformed TID Record - Missing or invalid <i>tidType</i>	<i>tidType</i> must be present and populated for each TID record within the file.	Warning	22900
24903	Malformed TID Record - Missing or invalid <i>foreignTIDType</i>	<i>foreignTIDType</i> must be present and populated for each record in the file where <i>tidType</i> is 'FOREIGN'. <i>foreignTIDType</i> must not be populated for any record in the file where <i>tidType</i> is not set as 'FOREIGN'.	Warning	22900
24904	Malformed TID Record - Missing or invalid <i>foreignTIDCountryCd</i>	<i>foreignTIDCountryCd</i> must be present and populated with a valid value for each record in the file where <i>tidType</i> is 'FOREIGN' and <i>foreignTIDType</i> is not 'LEI'. <i>foreignTIDCountryCd</i> must not be populated for any record in the file where <i>tidType</i> is not set as 'FOREIGN', or where <i>tidType</i> is set as 'FOREIGN' and <i>foreignTIDType</i> is set as 'LEI'.	Warning	22914
24905	Malformed TID Record - Missing or invalid <i>tidValue</i>	<i>tidValue</i> must be present and populated for each record in the file, and must be a 64 byte hexadecimal value.	Warning	22900
24906	Malformed TID Record - Invalid Input Identifier used to generate <i>tidValue</i> for <i>tidType</i> of SSN/ITIN	When <i>tidType</i> is SSN/ITIN, the original Input Identifier used to generate the <i>tidValue</i> must be properly formatted and adhere to the valid range of the SSN/ITIN identifier type.	Warning	22900
24907	Malformed TID Record - Invalid Input Identifier used to generate <i>tidValue</i> for <i>tidType</i> of EIN	When <i>tidType</i> is EIN, the original Input Identifier used to generate the <i>tidValue</i> must be properly formatted and adhere to the valid range of the EIN identifier type.	Warning	22900

Error Code	Error Code Description	Explanation	Warning/Error	Corresponding Data Validation Error Code
24908	Missing or invalid <i>replacedByTIDType</i>	When populated, <i>replacedByTIDType</i> must be populated with a valid value. <i>replacedByTIDType</i> must be present and populated when <i>replacedByTID</i> is populated.	Warning	22914
24909	Missing or invalid <i>replacingForeignTIDType</i>	<i>replacingForeignTIDType</i> must be present and populated for each record in the file where <i>replacedByTIDType</i> is 'FOREIGN'. <i>replacingForeignTIDType</i> must not be populated for any record in the file where <i>replacedByTIDType</i> is not set as 'FOREIGN'.	Warning	22914
24910	Missing or invalid <i>replacingForeignTIDCountryCd</i>	<i>replacingForeignTIDCountryCd</i> must be present and populated with a valid value for each record in the file where <i>replacedByTIDType</i> is 'FOREIGN' and <i>replacingForeignTIDType</i> is not 'LEI'. <i>replacingForeignTIDCountryCd</i> must not be populated for any record in the file where <i>replacedByTIDType</i> is not set as 'FOREIGN', or where <i>tidType</i> is set as 'FOREIGN' and <i>replacingForeignTIDType</i> is set as 'LEI'.	Warning	22914
24911	Missing or invalid <i>replacedByTID</i>	When populated, <i>replacedByTID</i> must be a 64 byte hexadecimal value. Must be present when <i>replacedByTIDType</i> is populated. Each <i>replacedByTID</i> must have a corresponding valid entry in the Identifiers submission file.	Warning	22914
24912	Invalid Input Identifier used to generate <i>replacedByTID</i> for <i>replacedByTIDType</i> of SSN/ITIN	When <i>replacedByTIDType</i> is 'SSN/ITIN', the original Input Identifier used to generate the <i>replacedByTID</i> must be properly formatted and adhere to the valid range of the 'SSN/ITIN' identifier type.	Warning	22914
24913	Invalid Input Identifier used to generate <i>replacedByTID</i> for <i>replacedByTIDType</i> of EIN	When <i>replacedByTIDType</i> is 'EIN', the original Input Identifier used to generate the <i>replacedByTID</i> must be properly formatted and adhere to the valid range of the 'EIN' identifier type.	Warning	22914
24914	Malformed TID Record - <i>customerRecordID</i> not present in paired Data file	Each <i>customerRecordID</i> present in the TIDs file must have a corresponding valid entry in the paired Data submission file.	Warning	22914
24915	Malformed TID Record - Duplicated <i>customerRecordID</i>	Each <i>customerRecordID</i> must be present in the submission file only once. Affected records will not be processed for further validation checks.	Warning	22526
24916	Data type violation - TID	TID Record contains one or more attribute values that violate the data type for the attribute.	Warning	22526, 22900, or 22914

B.4 Inconsistency Codes

Table 28: CAT CAIS Inconsistency Codes

Inconsistency Code	Inconsistency Code Description	Explanation	Material/Minor
30002	Inconsistent data for <i>yearOfBirth</i>	The Natural Person Customer Record has inconsistent data present for the <i>yearOfBirth</i> attribute.	Material
30003	Inconsistent data for <i>ein</i>	The Legal Entity Customer Record has inconsistent data present for the <i>ein</i> attribute.	Material
30004	Foreign TID reported as both Natural Person and Legal Entity	The same Foreign TID has been reported as both a Natural Person and a Legal Entity. Each CAT Customer must be only one record type.	Material

Appendix C: Glossary

Term	Definition
Account	For the purpose of the CAIS Technical Specification, the term Account is synonymous with Firm Designated ID (FDID). An Account may represent an account, Relationship ID, or Entity ID.
Account Opening Date	Account Opening Date is defined in the CAT NMS Plan. For Account data submission, Account Opening Date is to be reported as <i>fdidDate</i> within the submission file.
Authorized Trader	The CAT NMS Plan defines an Authorized Trader as “any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s)”.
CAT Customer	SEC Rule 613(j)(3) defines a CAT Customer as “(i) the account holder(s) of the account at a registered broker-dealer originating the order; and (ii) any person from whom the broker-dealer is authorized to accept trading instructions for such account, if different from the account holder(s)”.
CAT Reporter CRD	The CAT Reporter CRD is the Central Registration Depository identifier that an Industry Member uses to report CAT Account and Customer data.
CAT Submitter ID	The CAT Submitter ID is the identifier of the CAT Reporting Agent, the entity authorized to submit the files to CAT on behalf of the Industry Member.
CAT Trading Day	<p>CAT Trading Day for Industry Members is defined as beginning immediately after 4:15:00PM and no fractions of a second Eastern Time on one trade date and ending at exactly 4:15:00PM and no fractions of a second Eastern Time on the next trading date.</p> <p>Weekends or any day that all equities or options national securities exchanges are closed are not considered a CAT Trading Day.</p> <p>Trading Days that close early end 15 minutes after the Market Close.</p>
CCID	<p>The Customer ID, also known as CAT Customer ID or CCID, is a unique identifier generated by the Plan Processor, that is defined within SEC Rule 613(j)(5) as “with respect to a customer, a code that uniquely and consistently identifies such customer for purposes of providing data to the central repository.” The CCID is a globally unique identifier generated for each unique TID value generated from a well-formatted and valid Input Identifier, in a way that is not reversible to the TID or textual Input Identifier value. The translation of TID to CCID is completed in the CCID Subsystem, in isolation from any of the Customer or Account reference data.</p> <p>The CCID value is never provided to CAT Reporters or Submitters and is only used within CAT to uniquely reference a single Customer.</p>
Discretion	If <i>hasDiscretion</i> is populated with 'true', this indicates the Authorized Trader has the ability to place orders on the Account without prior approval of the account holder(s). For CAIS reporting purposes, <i>hasDiscretion</i> value of 'true' does not indicate that an order was received with a “Not Held” instruction where the broker-dealer or trader only has discretion as to the price and time of execution.
FDID	FDID is defined in Section 1.1 of the CAT NMS Plan as “(1) a unique and persistent identifier for each trading account designated by Industry Members for purposes of providing data to the Central Repository provided, however, such identifier may not be the account number for such trading account if the trading account is not a proprietary account; (2) a unique and persistent relationship identifier when an Industry Member does not have an account number available to its order handling and/or execution system at the time of order receipt, provided, however, such identifier must be masked; or (3) a unique and persistent entity identifier when an employee of an Industry Member is exercising discretion over multiple client accounts and creates an aggregated order for which a trading account number of the Industry Member is not available at - 6 - the time of order

	<p>origination”</p> <p>See CAT FAQ M2 for more information on the prohibition on use of actual account numbers. Refer to the CAT Industry Presentation on FDID for additional information.</p>
Input Identifier	<p>A generic term for the types of identifiers used to identify unique Customer Records, including SSN, ITIN, EIN, and FOREIGN. Input Identifiers are always translated to Transformed Identifier values prior to submission to CAT within the Transformed Identifiers file.</p>
Legal Entity	<p>For purposes of CAT reporting, a Legal Entity is a CAT Customer whose Input Identifier used to generate the Customer’s TID is an EIN, or, for a Foreign Legal Entity, a National Registration or Tax Identifier, LEI or other Government-Issued Identifier issued by a non-national level government body or agency, such as a regional agency.</p>
Natural Person	<p>For purposes of CAT reporting, a Natural Person is a CAT Customer whose Input Identifier used to generate the Customer’s TID is an SSN, ITIN; and for Foreign Natural Persons, a National Registration or Tax Identifier, Country of Domicile and Passport Number, Driver’s License, or Permanent Resident Identifier.</p>
CAT NMS Plan-Defined PII	<p>As defined in the CAT NMS Plan, means personally identifiable information, including a social security number or tax identifier number or similar information; Customer Identifying Information and Customer Account Information.</p>
Sensitive Identifier	<p>Input Identifiers, including Social Security Number and Individual Taxpayer Identification Number, which must not be submitted to CAIS in plaintext and must be hashed into a Transformed Identifier using an SHA-256 hashing algorithm prior to submission to CAIS.</p>
TID	<p>The Transformed Identifier (TID) is a hashed version of the Input Identifier, submitted by the CAT Reporter to CAT in place of the Input Identifier, in accordance with the exemptive relief granted by the SEC on March 17, 2020. The CAT Reporter has the responsibility to translate Input Identifiers to TID values prior to submission, in accordance with the mathematical logic provided in Section 3.4: Translation of Input Identifiers to TID Values. Input Identifiers used to generate TID values must be input in valid format – that is, 999-99-9999 for SSN or ITIN, and 99-9999999 for EIN</p>
Trade Date	<p>Trade Date for Industry Member is defined as beginning immediately after 23:59:59.999999 ET on Trade Date T - 1 and up to 23:59:59.999999 ET of the next Trade Date T.</p> <p>Weekends and holidays are not considered a Trade Date.</p>

Appendix D: Data Dictionary

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
<i>accountName</i>	Extended Text (200)	FDID Record	R	Exactly One per FDID Record	The name applied to the 'ACCOUNT', 'RELATIONSHIP', or 'ENTITYID' at the CAT Reporter Firm.	
<i>accountType</i>	Array [Choice]	FDID Record	R	Exactly One per FDID Record	Representation of the type or types of Account the FDID represents. All applicable values for the FDID must be included in the array. Values: AVERAGE – Industry Member-owned average price account. DVP/RVP – Delivery versus Payment account/Receipt versus Payment account. EDUCATION – Established for education savings including 529 Plan or Coverdale ESA. ENTITYID – Entity ID type record. Only allowable when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts. ERROR – Error account. FIRM – Is owned by the reporting Industry Member firm, including proprietary trading accounts and inventory accounts. INSTITUTION – An institutional Account as defined in FINRA Rule 4512(c). MARKET – Market Making Account. MARGIN – Approved for trading on Margin. OPTION – Approved for trading Options. OTHER – Account which does not meet the criteria for any other	“AVERAGE” “DVP/RVP” “EDUCATION” “ENTITYID” “ERROR” “FIRM” “INSTITUTION” “MARKET” “MARGIN” “OPTION” “OTHER” “RELATIONSHIP” “RETIREMENT” “UGMA/UTMA”

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					<p>listed value.</p> <p>RELATIONSHIP – Relationship type record.</p> <p>RETIREMENT – As defined by the IRS:</p> <ul style="list-style-type: none"> • Individual Retirement Arrangements (IRAs) • Roth IRAs • 401(k) Plans • 403(b) Plans • SIMPLE IRA Plans (Savings Incentive Match Plans for Employees) • SEP Plans (Simplified Employee Pension) • SARSEP Plans (Salary Reduction Simplified Employee Pension) • Payroll Deduction IRAs • Profit-Sharing Plans • Defined Benefit Plans • Money Purchase Plans • Employee Stock Ownership Plans (ESOPs) • Governmental Plans • 457 Plans <p>UGMA/UTMA – Established as a custodial account under the Uniform Gift to Minors Act or Uniform Transfer to Minors Act.</p>	
<i>addressList</i>	Multi-Dimensional Array	FDID Record	R	Exactly One per FDID Record	Structure for the array of Address records that are associated to the FDID Record within the file. At a minimum, an 'ADDRESS1' record populated with the mailing address associated to the FDID must be included for each FDID Record within the file. Additional addresses may be included for the FDID if available within the CAT Reporter Firm's system.	
<i>addressList</i>	Multi-Dimensional Array	Natural Person Customer Record	C	Zero or One per Natural Person Customer Record	Structure for the array of Address records that are associated to the Customer Record within the file. If the <i>addressList</i> is included,	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					an 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the CAT Reporter Firm's system.	
<i>addressList</i>	Multi-Dimensional Array	Legal Entity Customer Record	C	Zero or One per Legal Entity Customer Record	Structure for the array of Address records that are associated to the Customer Record within the file. If the <i>addressList</i> is included, an 'ADDRESS1' record must be included for the Customer Record. Additional addresses may be included for the Customer if available within the CAT Reporter Firm's system.	
<i>addrLine1</i>	Extended Text (40)	Address Record	R	Exactly One per Address Record	The first Address Line for the address.	
<i>addrLine2</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line.	
<i>addrLine3</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> is not provided.	
<i>addrLine4</i>	Extended Text (40)	Address Record	O	Zero or One per Address Record	Additional space for Address Line. Must not be provided if <i>addrLine2</i> and <i>addrLine3</i> are not provided.	
<i>addrType</i>	Choice	Address Record	R	Exactly One per Address Record	The type of the Address record. Values: ADDRESS1 – The first address record of the FDID. ADDRESS2 – The second address record of the FDID. ADDRESS3 – The third address record of the FDID. ADDRESS4 – The fourth address record of the FDID.	"ADDRESS1" "ADDRESS2" "ADDRESS3" "ADDRESS4"
<i>addrType</i>	Choice	Address Record	R	Exactly One per Address Record	The type of the Address record. Values: ADDRESS1 – The first address record of the Customer.	"ADDRESS1" "ADDRESS2" "ADDRESS3" "ADDRESS4"

<i>Field Name</i>	<i>Data Type</i>	<i>JSON Object</i>	<i>Include Key</i>	<i>Occurrences</i>	<i>Description</i>	<i>Format/ Accepted Values</i>
					ADDRESS2 – The second address record of the Customer. ADDRESS3 – The third address record of the Customer. ADDRESS4 – The fourth address record of the Customer.	
<i>authTraderName</i>	Extended Text (200)	Authorized Trader Name List	R	Exactly One per Authorized Trader Name Record	The name of the Natural Person who has authority to place order for the account.	
<i>authTraderNameID</i>	Unsigned	Authorized Trader Name List	R	Exactly One per Authorized Trader Name Record	A unique reference to a single Authorized Trader Name for a single FDID, for a single submission file.	
<i>authTraderNamesList</i>	Multi-Dimensional Array	FDID Record	C	Zero or One per FDID Customer Record	Structure for the array of Authorized Trader Names that are associated to the FDID record within the file. Must only be used for Natural Person Authorized Traders where the Industry Member does not have all data required to report a full Natural Person CAT Customer record. Required if the FDID has one or more Authorized Trader Names; not required if the FDID does not have any Authorized Trader Names.	
<i>branchOfficeCRD</i>	Unsigned	FDID Record	C	Zero or One per FDID Record	The CRD for the Branch Office to which the FDID Record is assigned if applicable. Required if a Customer Account is assigned to a branch office other than the main office.	
<i>catReporterCRD</i>	Unsigned	Main	R	Exactly One per submission file	The CRD number assigned to the Industry Member to which the data within the file belongs.	
<i>catSubmitterID</i>	Unsigned	Main	R	Exactly One per submission file	The ID of the CAT Reporting Agent that submitted the file to CAT. In the case the CAT Reporter is submitting data for	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					themselves, they must still populate the CAT Submitter ID field.	
<i>city</i>	Extended Text (100)	Address Record	R	Exactly One per Address Record	City of the Address.	
<i>clearingBrokerID</i>	Array [Alphanumeric (4)]	FDID Record	C	Zero or One per FDID Record	The NSCC Clearing ID of the Industry Member that clears the Accounts. Must be populated if known to the CAT Reporter firm. All values included in the array must be separated by commas. Each value must be exactly four characters, including leading zeros. If the CAT Reporter firm is a self-clearing firm, they must report their own NSCC Clearing ID.	
<i>correctingFirmDesignatedID</i>	Text (40)	Correction Record	C	Zero or One per Correction Record	The <i>firmDesignatedID</i> that is correcting for the prior rejected FDID. The <i>correctingFirmDesignatedID</i> must be present in the submission file, or have been accepted in a prior CAT CAIS submission. Required if the <i>correctionAction</i> is 'CORRECTION' and the prior error being corrected was against an FDID.	
<i>correctingCustomerRecordID</i>	Unsigned	Correction Record	C	Zero or One per Correction Record	The <i>correctingCustomerRecordID</i> that is correcting for the prior rejected <i>customerRecordID</i> record. The <i>correctingCustomerRecordID</i> must be present in the submission file. Required if the <i>correctionAction</i> is 'CORRECTION' and the prior error being corrected was against a Customer.	
<i>correctionAction</i>	Choice	Correction Record	R	Exactly One per Correction Record	The particular action that is being taken to correct for the prior rejection. Values: CORRECTION – A new entry is included in the	"CORRECTION" "DELETE"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					submission file to correct for the prior rejected record using a new <i>firmDesignatedID</i> or new Customer Record. DELETE – The prior rejection needs to be cleared without a new record being submitted.	
<i>correctionList</i>	Multi-Dimensional Array	Main	C	Zero or One per Submission File	Structure for the array of Correction records within the file. Required if the submission file contains one or more Correction records. Must only be used for correcting rejections caused by a malformed <i>firmDesignatedID</i> or TID value.	
<i>correspondentCRD</i>	Unsigned	Main	C	Zero or One per submission file	The CRD number of the related Introducing Broker or Correspondent firm, if applicable. All FDID and Customer data reported in the file must be for the specified firm.	
<i>countryCode</i>	Choice	Address Record	R	Exactly One per Address Record	Code of the Country of the Address, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values.	AA
<i>customerRecordID</i>	Unsigned	FDID Customer Record	R	Exactly One per FDID Customer Record	A unique reference to a single Customer for a single submission file.	
<i>customerRecordID</i>	Unsigned	Legal Entity Customer Record	R	Exactly One per Legal Entity Customer Record	A unique reference to a single Customer for a single submission file.	
<i>customerRecordID</i>	Unsigned	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	A unique reference to a single Customer for a single submission file.	
<i>customerRecordID</i>	Unsigned	TID Record	R	Exactly One per TID Record	A unique reference to a single Customer Record in the CAIS data file.	
<i>customerType</i>	Array [Choice]	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in	“ACCREDITED” “ADVISER” “CP” “EMPLOYEE”

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					<p>the array.</p> <p>Values:</p> <p>ACCREDITED – Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the Industry Member’s general customer and account records.</p> <p>ADVISER – Customer was identified as being associated with a US registered Investment Adviser, if the fact that the Customer is associated with a US registered Investment Adviser is maintained as an attribute in the Industry Member’s general customer and account records.</p> <p>CP – Customer identified itself as an officer, director, or 10% or more share owner of a public company at the time of account opening.</p> <p>EMPLOYEE – Customer is an employee or associated person of the CAT Reporter, as defined in Section 3(a)(18) of the Securities Exchange Act of 1934. If employee attribute is maintained by the CAT Reporter at the group level, this value may also include Customers employed by affiliated group companies.</p> <p>FOREIGN – Customer is a Natural Person or Legal Entity that does not have a US Tax Identifier.</p> <p>NOTAPPLICABLE – None of the defined terms are applicable to the Customer.</p> <p>OTHBKR – Customer is associated with a US registered Broker-Dealer other than the</p>	<p>“FOREIGN”</p> <p>“NOTAPPLICABLE”</p> <p>“OTHBKR”</p> <p>“TRUST”</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					Industry Member. TRUST – Customer is a Trust.	
<i>customerType</i>	Array [Choice]	Legal Entity Customer	R	Exactly One per Legal Entity Customer Record	<p>Representation of the characteristics of the CAT Customer. All applicable values for the CAT Customer must be included in the array.</p> <p>Values: ACCREDITED – Customer was identified as an accredited investor by the Industry Member as set forth in Rule 501(a) of the Securities Act of 1933, if maintained in the Industry Member’s general customer and account records. ADVISER – Customer was identified as a US registered Investment Adviser, if the fact that the Customer is a US registered Investment Adviser is maintained as an attribute in the Industry Member’s general customer and account records. BD – Customer is a US registered Broker/Dealer. FOREIGN – Customer is a Natural Person or Legal Entity that does not have a US Tax Identifier. NOTAPPLICABLE – None of the defined terms are applicable to the Customer. RIC – Customer is a Registered Investment Company, as defined in the Investment Company Act of 1940 (15 U.S.C. § 80a–3(a)(1)). TRUST – Customer is a Trust.</p>	“ACCREDITED” “ADVISER” “BD” “FOREIGN” “NOTAPPLICABLE” “RIC” “TRUST”
<i>doingBusinessAs</i>	Extended Text (200)	Natural Person Customer Record	C	Zero or One per Natural Person Customer	The Doing Business As name for a sole proprietorship or other legal entity Customer	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
				Record	reported to CAIS using 'SSN/ITIN' as the Input Identifier. Must be populated when reporting a CAT Customer as a Natural Person record that is a sole proprietorship, trust, or otherwise conducts business under a name other than the Natural Person's legal name.	
<i>DVPCustodianID</i>	Array [Alphanumeric (5)]	FDID Record	C	Zero or One per FDID Record	Required when <i>accountType</i> includes 'DVP/RVP'. If the custodian is a US broker-dealer, this field must be populated with the clearing number of the custodian. If the custodian is a bank and is not a registered broker-dealer, this field must be populated with the DTC number of the bank. If there is no clearing number or DTC number, this field must be populated with a value of 'FOR'.	
<i>ein</i>	Text (10)	Legal Entity Customer Record	C	Zero or One per Legal Entity Customer Record	The Employer Identification Number (EIN) of the Customer, in 99-9999999 format. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was 'EIN'.	99-9999999
<i>fdidCustomerList</i>	Multi-Dimensional Array	FDID Record	C	Exactly One per FDID Record	Structure for the array of Customer Records that are associated to the FDID Record within the file. Required when the FDID is being reported to CAIS for the first time, and also required when the FDID is not being ended.	
<i>fdidDate</i>	Date (Number) (8)	FDID Record	R	Exactly One per FDID Record	Date on which the FDID Account opened, as defined in Section 2.2.3 of this specification, in YYYYMMDD format.	YYYYMMDD
<i>fdidEndDate</i>	Date (Number)	FDID Record	C	Zero or One per FDID	Date on which the Account was closed or	YYYYMMDD

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
	(8)			Record	the Relationship was ended, in YYYYMMDD format. Must be provided if the <i>fdidEndReason</i> field is populated.	
<i>fdidEndReason</i>	Choice	FDID Record	C	Zero or One per FDID Record	Reason why the Account was closed or the Relationship was ended. Must be provided if the <i>fdidEndDate</i> field is populated. Values: CORRECTION – FDID was erroneously reported. ENDED – FDID was ended (e.g., account was closed). INACTIVE – Indicates the FDID has had no CAT-reportable transaction activity associated with the FDID in the prior six months. REPLACED – FDID replaced by another FDID within the CAT Reporter Firm. See FAQ M16 regarding FDID replacements. OTHER – Other unlisted reason for ending the FDID. TRANSFER - FDID was transferred to another CAT Reporter Firm.	“CORRECTION” “ENDED” “INACTIVE” “REPLACED” “OTHER” “TRANSFER”
<i>fdidRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of <i>firmDesignatedID</i> attribute occurrences within the file. Used to validate the count of FDID Records intended to be submitted within the file matches the count of records present in the file.	
<i>fdidRecordID</i>	Unsigned	FDID Record	R	Exactly One per FDID Record	A unique reference to a single FDID for a single submission file.	
<i>fdidRecordList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of FDID Records that are included in the file. Required if the submission file contains	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					one or more FDID Records; not required if no FDID Records are included in the file.	
<i>fdidType</i>	Choice	FDID Record	R	Exactly One per FDID Record	Representation of the type of record of the reported FDID. Values: ACCOUNT – Account type record. RELATIONSHIP – Relationship type record. ENTITYID – Entity ID type record. Only allowable when the FDID represents the Entity ID of the firm when an employee of the firm is exercising discretion over multiple Customer Accounts.	“ACCOUNT” “RELATIONSHIP” “ENTITYID”
<i>firmDesignatedID</i>	Text (40)	FDID Record	R	Exactly One per FDID Record	The Firm Designated ID of the ‘ACCOUNT’, ‘ENTITYID’, or ‘RELATIONSHIP’ being reported by the CAT Reporting firm.	
<i>firstName</i>	Extended Text (40)	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	The First Name known for the Customer. If the Customer legally has one name, this field must be populated with ‘NNVE’ (No Name Value Exists).	
<i>foreignTIDCountryCd</i>	Choice	TID	C	Zero or One per TID Record	Code of the Country that issued the Input Identifier used to generate the ‘FOREIGN’ type Transformed Identifier, in ISO 3166-1 alpha-2 format. Please view Appendix E for acceptable values. Required if the <i>tidType</i> is ‘FOREIGN’ and the <i>foreignTIDType</i> is not ‘LEI’.	AA
<i>foreignTIDType</i>	Choice	TID Record	C	Zero or One per TID Record	The type of Foreign Input Identifier used to generate a ‘FOREIGN’ type TID. Required to be populated if the <i>tidType</i> is ‘FOREIGN’. The following hierarchy must be followed if more than one identifier type is available for a foreign	“DRIVERLICENSE” “LEI” “NATIONALID” “OTHGOVT” “PASSPORT” “PERMANENT”

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					<p>CAT Customer:</p> <p>Values:</p> <ol style="list-style-type: none"> 1. NATIONALID – National Registration or Tax Identifier, if the CAT Reporter knows the identifier was issued by a national-level government body or agency, or when the CAT Reporter cannot distinguish if the issuer is a national-level government body or agency. 2. LEI – Legal Entity Identifier. 3. PASSPORT – Country of Issuance and Passport Number. 4. PERMANENT – Permanent Resident Identifier. 5. DRIVERLICENSE – Driver’s License identifier. 6. OTHGOVT – Other Government-Issued Identifier, if the CAT Reporter knows the identifier was issued by a non-national level government body or agency, such as a regional agency. Must not be used if one of the other allowable values apply. 	
<i>hasDiscretion</i>	Boolean	FDID Customer Record	C	Zero or One per FDID Customer Record	Indicates if the Authorized Trader has the ability to place orders on the Account without prior approval of the Holder(s). Not to be provided as true if role is ‘NTHOLDER’ or ‘TRDHOLDER’.	true false
<i>largeTraderID</i>	Text (13)	Large Trader Record	R	Exactly One per Large Trader Record	The LTID or ULTID associated to the FDID in the CAT Reporter’s system. For LTID Records, the identifier must be eight numeric characters, followed by a dash, followed by four numeric characters. For ULTID Records, the identifier must start with ‘ULT’, followed by	For LTID – 99999999-9999 For ULTID – ULTXXXXX-XXXX

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					alphanumeric [0-9A-Z] characters for the fifth through eighth positions, followed by a dash, followed by four alphanumeric [0-9A-Z] characters.	
<i>largeTraderList</i>	Multi-Dimensional Array	FDID Record	C	Zero or One per FDID Record	Structure for the array of LTID and ULTID Records that are associated to the FDID Record within the file. Required if the submission file contains one or more LTID/ULTID Records associated to the FDID Record; not required if no LTID/ULTID Records are included in the file in association to the reported FDID.	
<i>largeTraderRecordID</i>	Unsigned	Large Trader Record	R	Exactly One per Large Trader Record	A unique reference to a single LTID or ULTID in reference to a single FDID for a single submission file.	
<i>lastName</i>	Extended Text (200)	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	The Last Name known for the Customer.	
<i>legalEntityCustomerList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of Legal Entity type Customer Records that are included in the file. Required if the submission file contains one or more Legal Entity Customer Records; not required if no Legal Entity Customer Records are included in the file.	
<i>legalEntityCustomerRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of <i>customerRecordID</i> attribute occurrences within the file for Legal Entity type Customers. Used to validate the count of Legal Entity Customer Records intended to be submitted within the file matches the count of records present in the file.	
<i>legalName</i>	Extended	Legal	R	Exactly One	The Legal Name known	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
	Text (200)	Entity Customer Record		per Legal Entity Customer Record	for the Customer entity.	
<i>lei</i>	Alphanumeric (20)	Legal Entity Customer Record	C	Zero or One per Legal Entity Customer Record	The Legal Entity Identifier (LEI) of the Customer. Must be provided if known to the Industry Member. Must be included if the Input Identifier used to generate the Transformed Identifier of the Customer was 'LEI'.	
<i>ltidEffectiveDate</i>	Date (Number) (8)	Large Trader Record	R	Exactly One per Large Trader Record	Date on which the LTID or ULTID became associated to the FDID within the CAT Reporter's system, in YYYYMMDD format.	YYYYMMDD
<i>ltidEndDate</i>	Date (Number) (8)	Large Trader Record	C	Zero or One per Large Trader Record	Date on which the LTID or ULTID was no longer associated to the FDID within the CAT Reporter's system, in YYYYMMDD format. Must be provided if the <i>ltidEndReason</i> field is populated.	YYYYMMDD
<i>ltidEndReason</i>	Choice	Large Trader Record	C	Zero or One per Large Trader Record	Reason why the LTID or ULTID was no longer associated to the FDID. Must be populated in order to end date an LTID-to-FDID association in the system. Must be provided if the <i>ltidEndDate</i> field is populated. Values: CORRECTION – LTID was erroneously reported. ENDED – LTID-to-FDID association was ended. INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the prior six months. REPLACED – LTID was replaced by a different LTID or the FDID was replaced by a different FDID. OTHER – Other unlisted	"CORRECTION" "ENDED" "INACTIVE" "REPLACED" "OTHER" "TRANSFER"

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					reason for ending the LTID-to-FDID association. TRANSFER – LTID association was ended because the FDID was transferred to another Industry Member.	
<i>middleName</i>	Extended Text (20)	Natural Person Customer Record	O	Zero or One per Natural Person Customer Record	The Middle Name or initial known for the Customer.	
<i>nameSuffix</i>	Choice	Natural Person Customer Record	O	Zero or One per Natural Person Customer Record	The Name Suffix known for the Customer. Values: FIFTH FOURTH JUNIOR SENIOR THIRD	“FIFTH” “FOURTH” “JUNIOR” “SENIOR” “THIRD”
<i>naturalPersonCustomerList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of Natural Person type Customer Records that are included in the file. Required if the submission file contains one or more Natural Person Customer Records; not required if no Natural Person Customer Records are included in the file.	
<i>naturalPersonCustomerRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of <i>customerRecordID</i> attribute occurrences within the file for Natural Person type Customers. Used to validate the count of Natural Person Customer Records intended to be submitted within the file matches the count of records present in the file.	
<i>postalCode</i>	Text (15)	Address Record	C	Zero or One per Address Record	Postal Code of the Address. Must be provided if Postal Codes exist for the Country of the Address. Please view Appendix E for acceptable formatting per Country.	
<i>priorCATReporterCRD</i>	Unsigned	FDID Record	C	Zero or One per FDID	CRD of the CAT Reporter firm from	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
				Record	which the FDID was acquired. Must be provided if FDID was acquired by the CAT Reporter. Must be provided if <i>priorCATReporterFDID</i> is populated.	
<i>priorCATReporterFDID</i>	Text (40)	FDID Record	C	Zero or One per FDID Record	The original FDID for the record acquired by the current CAT Reporter firm. Must be provided if FDID was acquired by the CAT Reporter.	
<i>regionCode</i>	Extended Text(40)	Address Record	C	Zero or One per Address Record	Code of the local region of the Address. Must be provided if known to the CAT Reporter. Must be provided in ISO 3166-2 format if the region list is available in Appendix E for the Country of the Address (i.e., United States and Canada). If the region for the Country of the Address is not available in Appendix E, it is not required to be reported in ISO 3166-2 format.	AA-XX* *Format when <i>countryCode</i> is 'US' or 'CA'
<i>registeredRepCRD</i>	Array [Unsigned]	FDID Record	O	Zero or One per FDID Record	The Central Registration Depository ID assigned to the Registered Representative(s) responsible for the FDID Record (as identified as such per SEC Rule 17a-3) that can provide trading advice for the Account. When optionally populated, all CRDs included in the array must be only numeric values, must not contain any leading zeroes, and must be separated by commas.	
<i>rejectionID</i>	Unsigned	Correction Record	R	Exactly One per Correction Record	The <i>rejectionID</i> from a prior submission that was created for the particular Data Ingestion error being corrected.	
<i>replacedByFDID</i>	Text (40)	FDID Record	C	Zero or One per FDID Record	The new FDID replacing the currently reported FDID, used to provide historical linkage across replaced records over time. Must be provided if	

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					the <i>fdidEndReason</i> is 'REPLACED'. Must not be provided if the <i>fdidEndReason</i> is any value other than 'REPLACED'.	
<i>replacedByTID</i>	Hexadecimal (64)	TID Record	C	Zero or One per TID Record	The obfuscated TID value created in place of the SSN, ITIN, EIN, or Foreign identifier of the Customer Record that has taken the place of the reported Customer Record. Must only be used when there has been a change in a CAT Customer's Input Identifier, resulting in a new TID value. Must not be used when ending a CAT Customer Record which was reported with an erroneous Input Identifier.	
<i>replacedByTIDType</i>	Choice	TID Record	C	Zero or One per TID Record	The type of obfuscated TID value created in place of the Input Identifier of the Customer Record that has taken the place of the reported Customer Record. Values: EIN – Indicates the <i>replacedByTID</i> was generated using an Employer Identification Number (EIN). FOREIGN – Indicates an identifier other than an EIN, SSN, or ITIN was used to generate the <i>replacedByTID</i> . SSN/ITIN – Indicates the <i>replacedByTID</i> was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).	"EIN" "FOREIGN" "SSN/ITIN"
<i>replacingForeignTIDCountryCd</i>	Choice	TID	C	Zero or One per TID Record	Code of the Country that issued the Input Identifier used to generate the 'FOREIGN' type Transformed Identifier that has taken the place of the reported Customer Record, in ISO 3166-1 alpha-2	AA

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					format. Please view Appendix E for acceptable values. Required if the <i>replacedByTIDType</i> is 'FOREIGN' and the <i>replacingForeignTIDType</i> is not 'LEI'.	
<i>replacingForeignTIDType</i>	Choice	TID Record	C	Zero or One per TID Record	<p>The type of Foreign Input Identifier used to generate a 'FOREIGN' type TID that has taken the place of the reported Customer Record. Required to be populated if the <i>replacedByTIDType</i> is 'FOREIGN'. The following hierarchy must be followed if more than one identifier type is available for a foreign CAT Customer:</p> <p>Values:</p> <ol style="list-style-type: none"> 1. NATIONALID – National Registration or Tax Identifier, if the CAT Reporter knows the identifier was issued by a national-level government body or agency, or when the CAT Reporter cannot distinguish if the issuer is a national-level government body or agency. 2. LEI – Legal Entity Identifier. 3. PASSPORT – Country of Issuance and Passport Number. 4. PERMANENT – Permanent Resident Identifier. 5. DRIVERLICENSE – Driver's License identifier. 6. OTHGOVT – Other Government-Issued Identifier, if the CAT Reporter knows the identifier was issued by a non-national level government body or agency, such as a regional agency. Must not be used if one of the other allowable values 	<p>"DRIVERLICENSE"</p> <p>"LEI"</p> <p>"NATIONALID"</p> <p>"OTHGOVT"</p> <p>"PASSPORT"</p> <p>"PERMANENT"</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					apply.	
<i>role</i>	Choice	FDID Customer Record	R	Exactly One per FDID Customer Record	<p>Representation of the type of role the Customer has on the FDID.</p> <p>Values:</p> <p>AUTH3RD – An Authorized Trader who is not a holder of the Account, nor an employee of the reporting Industry Member, who has authority to place orders for the Account without prior approval of the account holder(s).</p> <p>AUTHREP – An Authorized Trader who is not a holder of the Account but does have authority to place orders for the Account without prior approval of the account holder(s) and is either the reporting Industry Member or an employee of the reporting Industry Member, if the account holder specifically designates the natural person employee as authorized to trade for the Account independent of the authority granted to the entity Authorized Trader. See FAQ Q56 for more information.</p> <p>NTHOLDER – Holder of the Account that does not have authorization to trade on the Account.</p> <p>TRDHOLDER – Holder of the Account that also has authorization to trade on the Account.</p>	<p>“AUTH3RD”</p> <p>“AUTHREP”</p> <p>“NTHOLDER”</p> <p>“TRDHOLDER”</p>
<i>roleEndDate</i>	Date (Number) (8)	FDID Customer Record	C	Zero or One per FDID Customer Record	<p>Date on which the Customer ceased having the specified role on the FDID, in YYYYMMDD format. Must be provided if the <i>roleEndReason</i> field is populated.</p>	YYYYMMDD
<i>roleEndReason</i>	Choice	FDID Customer	C	Zero or One per FDID Customer	Reason why the Customer ceased having the specified role	<p>“CORRECTION”</p> <p>“ENDED”</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
		r Record		Record	<p>on the FDID. Must be provided if the <i>roleEndDate</i> field is populated.</p> <p>Values:</p> <p>CORRECTION – Customer role on FDID was erroneously reported or FDID was erroneously reported.</p> <p>ENDED – Customer role on FDID was ended or FDID was ended (e.g., account was closed upon death of account holder).</p> <p>INACTIVE – Indicates the associated FDID has had no CAT-reportable transaction activity in the prior six months.</p> <p>REPLACED – Customer role on FDID was ended because the FDID was replaced with another FDID, or because the Customer Input Identifier was replaced with another Input Identifier.</p> <p>OTHER – Other unlisted reason for ending the Customer role on FDID.</p> <p>TRANSFER – Role ended because the FDID was transferred to another Industry Member.</p>	<p>“INACTIVE”</p> <p>“REPLACED”</p> <p>“OTHER”</p> <p>“TRANSFER”</p>
<i>roleStartDate</i>	Date (Number) (8)	FDID Customer Record	R	Exactly One per FDID Customer Record	Date on which the Customer entered into the specified role on the Account, in YYYYMMDD format.	YYYYMMDD
<i>tidType</i>	Choice	TID Record	R	Exactly One per TID record	<p>The specific type of Input Identifier used to generate the TID value.</p> <p>Values:</p> <p>EIN – Indicates the TID was generated using an Employer Identification Number (EIN).</p> <p>FOREIGN – Indicates an identifier other than an EIN, SSN, or ITIN was used to generate the TID.</p>	<p>“EIN”</p> <p>“FOREIGN”</p> <p>“SSN/ITIN”</p>

Field Name	Data Type	JSON Object	Include Key	Occurrences	Description	Format/ Accepted Values
					SSN/ITIN – Indicates the TID was generated using a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN).	
<i>tidRecordCount</i>	Unsigned	Main	R	Exactly One per submission file	The count of TID attribute occurrences within the file. Used to validate the count of TID records intended to be submitted within the file matches the count of records present in the file.	
<i>tidRecordList</i>	Multi-Dimensional Array	Main	C	Zero or One per submission file	Structure for the array of TID Records that are included in the file. Required if the submission file contains one or more TID records; not required if no TID records are included in the file.	
<i>tidValue</i>	Hexadecimal (64)	TID Record	R	Exactly One per TID Record	The obfuscated TID value created in place of the Input Identifier of the Customer Record whose data is being reported.	
<i>updateNotification</i>	Boolean	Legal Entity Customer Record	C	Zero or One per Legal Entity Customer Record	Indicates the Customer Record is being reported to close a Material Inconsistency, or is being reported with known updates to key attributes. If populated as true, changes to the key attributes will not result in a Material Inconsistency. Updates to the EIN included on a Legal Entity Customer Record will always result in a Material Inconsistency because if an EIN is available for the Customer, the EIN is to be used to create the TID for the submission and a differing EIN must result in a different TID.	true false
<i>updateNotification</i>	Boolean	Natural Person Customer Record	C	Zero or One per Natural Person Customer Record	Indicates the Customer Record is being reported to close a Material Inconsistency, or is being reported with known updates to key	true false

<i>Field Name</i>	<i>Data Type</i>	<i>JSON Object</i>	<i>Include Key</i>	<i>Occurrences</i>	<i>Description</i>	<i>Format/ Accepted Values</i>
					attributes including: Year of Birth. If populated as true, changes to the key attributes will not result in a Material Inconsistency.	
<i>version</i>	Text (10)	Main	R	Exactly One per submission file	The version of the CAIS Schema under which the data is reported. The version utilized for full Customer reporting will be 2.0.0.	2.0.0
<i>version</i>	Text (10)	Main	R	Exactly One per submission file	The version of the Transformed Identifiers Schema under which the data is reported. Initial version utilized will be 2.0.0	2.0.0
<i>yearOfBirth</i>	Year (Number) (4)	Natural Person Customer Record	R	Exactly One per Natural Person Customer Record	The Year of Birth known for the Customer in YYYY format.	YYYY

Appendix E: Country and Region Codes

Appendix E is located on www.catnmsplan.com/specifications/im. The appendix contains two lists, one list uses the Country Code, Country Name, and Postal Code formatting, while the other list uses the Region Code and Region Name. For countries present in Appendix E, the ISO 3166-2 formatted Region Code must be used. For countries not present in Appendix E, the Region Code is not required to be in ISO 3166-2 format. If no Postal Code format is noted, Postal Code is optional for inclusion for the Country and no formatting validation will occur. ⁴

⁴ ISO 3166-2 format validations for the *regionCode* and *postalCode* fields will NOT be applied to American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, or U.S. Minor Outlying Islands.