CAT Reporting Technical Specifications for Industry Members

Archived Revision/Change Log

6/26/20

Applicable Version: 2.2.1 r6

Version	Date	Author	Description
1.0	10/30/2018	Thesys CAT	Initial publication
1.01	2/22/2019	CAT NMS, LLC	Re-publish v1.0 (as v1.01) to reflect transition from Thesys CAT
1.1 Draft 1	2/28/2019	CAT NMS, LLC	Removed values (A,R,T) from allowable values for *reportingExceptionCode*
			Added the following allowable values to *handlingInstructions*: MOC, MOO, BIN
			Removed the following allowable values to *handlingInstructions*: CDIF, OPG
			Added the following fields to MOOM event: *routingOrigin, routingOriginType, aggregatedOrders, representativeInd*
			Removed *isoInd* field from MECO and MECOM events
			Removed *auctionFlag* from Data Dictionary
			Changed description of ATS fields to state "Applicable for ATSs only."
			Greyed out *quoteRejectedFlag* on MENQ event
			Extended *seqNum* to be alphanumeric (40)
			Changed *firmDesignatedID* to alphanumeric (40)
			Changed *firmDesignatedID* to be required on MENQ
			Changed Lifecycle Keys to Linkage Keys
			Changed *negotiatedTrade* field to *negotiatedTradeFlag*
			Updated language for *displayPrice* and *displayQty* fields
			Changed *Material Terms* in the glossary to state "strike price" instead of "sticker price"
			Greyed out *quoteID* and *priorQuoteID* on MEOM event
			Changed Stop Stock *handlingInstruction* to a Name/Value Pair
			Changed *accountType* to *accountHolderType*
			Greyed out *handlingInstructions* on route events.
			Removed *optionOriginCode* from options events.
			Removed *originator*
			Added *accountHolderType* to MONO
			Added *affiliateFlag* to MENO, MEOA, MONO, and MOOA events.
			Added *accountHolderType* of F Foreign
			Removed *reportingExceptionCode* field from MEOTQ event
			Changed definition of *electronicTimestamp* to the time the order was systematized.
			Removed the list of exchange specific values from the Data Dictionary in the *exchOriginCode* field
			Added *capacity* to MEFA event
			Added *manualOrderID* to MENO, MONO, MOOA events.
			Added new allowable value to *representativeInd* and *fulfillmentLinkType*: O
			Removed SH code from Routes to 2c
			Extended *FirmROEID* to 50 characters
			Removed *leavesQty* from MEOF
1.1 Draft 2	3/29/2019	CAT NMS, LLC	Made corrections to 2/28/19 change log
			Extended *FirmROEID* to 64 characters
			Updated go live dates for phases 2c and 2d

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			Removed MEOTQ event and added *quoteID* as a conditional field on the MEOT.
			Changed r*eporterID* and *submtterID* fields to *CATReporterIMID* and *CATSubmitterID*
			Added *actionType, orderReceivedDate, CATReporterIMID, OrigFirmROEID,* and *origFileName* to all event types
			Added *actionType, orderReceivedDate, origFirmROEID, origFileName* to Data Dictionary
			Added "Primary Order Event", "Secondary Order Event", "Trading Algorithm" , and "ROE" to the Glossary
			Defined NBBOSource of "Hybrid"
			Updated Section 2.2.1
			Updated Section 2.2.5 and section 4.3 to note that *handlingInstructions* are not required on Order Route events until Phase 2c.
			Updated Linkage Keys throughout the document
			Updated Section 3 with instructions for populating ATS fields
			Updated definition of *session* in Data Dictionary
			Updated definition of *custDspInstrFlag* in Data Dictionary and events, added allowable values to Data Dictionary
			Added *manualOrderID* to MEOM event.
			Added *affiliateFlag, cancelFlag,* and *cancelTimestamp* to MEOT
			Added *cancelFlag* and *cancelTimestamp* to Data Dictionary
			Changed *displayPrice* on MENO and MEOA to be an ATS Field
			Removed *handlingInstruction* of CLO
			Added letter values for NBBO Source fields
			Updated instances of "Equity Quote Event" to state "Quote Event" consistent with the name of the event type
			Updated definition of *fulfillmentLinkType* YF to remove reference to options order fulfilment
			Updated all references of web portal to state "CAT Reporter Portal"
			Changed the definition of *electronicTimestamp* to "the time the event was systematized"
			Removed *leavesQty* from MOOF
			Updated the definition of *priorOrderDate* in MEIR, MECOM, MEOM, MEOJ, MOIR, MOCOM, MOOM, and MOOJ events
			Removed *priorOrderDate* from MEOR, MECO, MECOC, MEOC, MEOT, MEOF, MOOR, MOCO, MOCOC, MOOC, and MEOF events.
			Updated the definition of *priorOrderID* in MEIR, MECOM, MEOM, MEOJ, MOIR, MOCOM, MOOM, and MOOJ events
			Removed *parentOrderID* from MECOM, MECOC, MOCOM and MOCOC events
			Updated the definition of *parentOrderID* in MECO and MOCO events
			Updated the definition of *orderID* in MEIR, MECOM, MECOC, and MOIR and MOCOC events
			Added *parentOrderDate* to MECO and MOCO event
			Added *destination* and *routingOrigin* MIAX Emerald ("MIAXOE")
			Changed the *destination* and *routingOrigin* value for MIAX Pearl

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			to "MIAXOP"
			Updated the definition of "Destination" in the MENQ event to state that it must match the *receiverIMID*
			Updated the definition of *initiator* in the Data Dictionary
			Removed *reason* and *cancelReason* fields
			Updated definition of *eventTimestamp* in MOCO, MOCOM and MOCOC events
			Added definition of *accountHolderType* "F"
			Updated definition of *senderIMID* in Data Dictionary
			Updated Section 2.5.3 for requirements when routing to a foreign broker-dealer
			Updated section 6 and 7 Submission, Feedback and Corrections Added and clarified date definitions in Appendix D Added draft of error codes in Appendix E Updated contact info for CAT Help Desk
2.0	4/29/2019	CAT NMS, LLC	Made corrections to 3/29/19 change log
			Added hyperlinks for external resources
			Streamlined wording throughout the document
			Added clarifying content to Table 1
			Added new FDID content
			Clarified that *quoteID* on Trade Events is not required until Phase 2c
			Clarified requirements for electronic and manual Option Events in Phases 2b and 2d
			Updated and clarified data types including adding examples for JSON and CSV
			Updated content in section 2.5 – Linkage Keys
			Added field order in all CAT events
			Updated definitions of CAT Events
			Greyed out events and Linkage Keys that are not applicable until Phase 2c and 2d
			Renamed "Order Internal Route" event to "Order Internal Route Accepted" event
			Reorganized, removed and added fields within the Trade, Fulfillment and Fulfillment Amendment Events
			Added Trade Supplement Event
			Defined fields in Option Order Supplement Event
			Updated fields in all events to support corrections including *errorROEID*
			Added *originatingIMID*, *dupROIDCond*, and *atsDisplayInd* fields
			Changed *routingOrigin* and *routingOriginType* to *senderIMID* and *senderType*
			Removed *session* from MEOA, MEOM, MOOA and MOOM events
			Updated *destination* values and descriptions for exchanges to be in sync with Plan Participants Spec
			Updated content in section 6 & 7
			Updated and clarified Appendix C and representative order fields, added value YE

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			Updated and Added Error Codes in Appendix E – Error Codes
			Updated and Added definitions in Appendix F – Glossary, including Primary and Secondary Events
			Added and updated definitions in Appendix G - Data Dictionary
			Updated allowable values for *accountHolderType* and *deptType* fields
			Removal of SH Codes
2.1	5/10/2019	CAT NMS, LLC	Made corrections to 4/29/19 change log
			Corrected JSON examples in 7.4.2 and 7.5.2
			Updated *timeInForce* definition in Data Dictionary for DAY and GTT.
			Updated *handlingInstructions* definition in Data Dictionary for values where both name and value are required.
			Corrected Data Type for *CATReporterIMID* and *originatingIMID*
			Increased field length for *orderID*, *tradeID*, *quoteID*, *fulfillmentID*, *parentOrderID, priorOrderID*, *priorQuoteID*, *priorFulfillmentID*, *routedOrderID*, *routedQuoteID*, *receivedQuoteID*.
			Updated Data Dictionary definition for *canceledFlag*
			Added missing fields to Data Dictionary including *CATReporterIMID*, *errorROEID* and *originatingIMID*.
			Added *receiverIMID* to MOOM event
			Removed *orderKeyDate* from MEFA event
			Corrected Seq# for MOOM, MENQ and MEFA events
			Eliminated error code 2069
			Added error codes 2140, 2141
			Updated error codes 2059, 2060, 2097, 2098
			Clarified requirements for provision of *routedOrderID* on MEOR, MEOA, MEOM, MOOR, MOOA, and MOCOM.
			Clarified timing for Warning and Error for data files without a metadata file.
			Updated *shortSaleExptInd* to Conditional Field
2.2	6/24/2019	CAT NMS, LLC	Made corrections to 5/10/19 change log
			Added and Updated Hyperlinks
			Added Section 1.2 Registration
			Updated 2.2.1 Firm Identifiers in File Submissions
			Updated 2.4 to remove unused Data Types, and clarify others
			Added Section 3.1.4 Display and Non-Display ATSs
			Added references to published JSON Schema
			Corrected errors in JSON examples
			Updated JSON Type for Name/Value Pairs to OBJECT.
			Updated JSON Schema definition and example.
			Added JSON and CSV syntax examples for *timeInForce*
			Updated table headers in Table 7
			Corrected errors in Linkage Key fields
			Clarified requirements for *tapeTradeID* field, changed to conditional, clarified TRF linkage requirements
			Clarified linkage requirements when *originatingIMID* is

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			populated, updated definition of *originatingIMID*, added to side details and *aggregatedOrders* field
			Updated requirements for electronic duplicate scenario
			Removed *shortSaleExptInd, cmtaFirm* and *executingFirm* fields
			Added *eventTimestamp* to MEOTS event
			Added *affiliateFlag* to MEOR and MOOR events
			Added *quoteWantedInd* to MEQR event
			Added *receivingDeskType* value for floor brokers
			Changed *nboQty* and *nbbQty* fields from 'O' (Optional) to 'A' (Applicable to ATSs only)
			Added *firmDesignatedID* to MENOS and MONOS events, changed *aggregatedOrders* field in MENOS and MONOS to conditional, updated guidance in sections 4.2, 5.2 and Data Dictionary
			Added *cancelFlag* and *cancelTimestamp* to MOOF, clarified requirements for *cancelFlag* and *cancelTimestamp*
			Updated requirements for *isoInd* and *routedOrderID* fields on MEOM event
			Updated data type for *firmROEID* and *firmDesignatedID* to Text.
			Changed *leavesQty* on MEOJ event to conditional, changed *leavesQty* on MECOC and MOCOC events to Real Quantity
			Removed *initiator* from MECOC and MOCOC events
			Clarified requirement for populating *price* and *orderType*
			Changed *clientDetails* to required field for MOOF and MOFA
			Changed *orderKeyDate* and *quantity* fields to required fields on MEOTS.
			Changed *priorFulfillmentID* to conditional field on MOFA
			Added *timeInForce* and *tradingSession* fields to MEIR and MOIR events, un-greyed *handlingInstructions* field on MEIR/MOIR events
			Changed *negotiatedTradeSide* field to *sideDetailsInd*, updated allowable values
			Added *reportingExceptionCode* value of 'N'
			Removed *onlyOneQuoteFlag* from MEQC
			Changed *infoBarrierID* from Alphanumeric (12) to Text (20)
			Changed *firmROEID* from Alphanumeric (64) to Text (64)
			Clarified restatement requirements on MEOM/MOOM events
			Added *handlingInstructions* value of 'OET' (Order Effective Time), updated phase table
			Updated definition of File Generation Date in Table 47.
			Clarifications to Section 6.1
			Updated 6.1.5.2 Schema Definition and example
			Added thirdParty field to Metadata submission files in support of Third Party Reporting agents.
			Updated Table 56: Feedback File Name Conventions
			Updated 7.2 to clarify file name errors.
			Updated Section 7 including clarification, and updates to Feedback File Naming Conventions, Metafile Definitions and examples.
			Data Elements removed from MECOC, MEQC, MONO, MOOR,

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			MOOA, MOCOC and MOOM specified as Reserved for Future Use; Data Dictionary definition added.
			Error codes added to File Integrity and Linkage Discovery with additional clarification.
			Corrected File Naming Convention for Metadata Files submitted to CAT.
2.2.1	8/31/2019	Consolidated Audit Trail, LLC	Applicable Schema Version: 2.2.1
			Corrected typos in the document
			Corrected errors in the Data Dictionary
			Updated Phase 2c reporting requirements in Table 1
			Added hyperlinks
			Added and clarified *handlingInstructions* values
			Added *reportingExceptionCode* value 'C'
			Removed *quoteID* fields from MENO and MEOM events
			Added Section 3.2.3 for Manual Trade events and Order Fulfillment events
			Added clarification to Table 6
			Added clarification to Section 4.3 on *affiliateFlag*
			Added clarification to Section 3.1.1 on NBBO quantity fields
			Added clarification to Section 4.12 on Internalized Trades
			Corrected Production System availability to 24 hours, 6 days per week
			Clarified definition of *side* in side details on Trade and Order Fulfillment events
			Clarified definition of *workingPrice* in Data Dictionary
			Section 6.1.3 - Added requirement for a maximum of 100 blocks included in a single Metadata Submission File.
			Section 6.1.3 – updated Metadata File definition to remove *rawHash*; *compressedHash* must be populated
			Section 6.1.4 – Add requirement for a maximum of 100,000 records per file for manual file uploads using the CAT Reporter Portal.
			Section 6.3.1 and 7.1.1 – Changed the number of days uploaded files and feedback files are available in Submitter SFTP directory to 10 calendar days
			Updated Sections 6.2 and 6.5 to align content with publications of the Industry Member Onboarding Guide and the FINRA CAT Connectivity Supplement for Industry Members
			Updated section 7.1.2 to specify rules associated with Feedback File names; Updated format of presented content and examples for clarity.
			Section 7.1.2 Feedback File Names - changed the file naming convention for Ingestion and Linkage Discovery Feedback Files to be consistent with approach for other stages.
			Section 7 updates to clarify validations for each Processing Stage; reordered 7.3. File Integrity rules for greater clarity
			Updated max length of filenames in feedback files
			Appendix D and Glossary - Added Definition of Trade Date
			Appendix E - Added/Removed/Updated Description and processing stages of Error Codes;

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			Changed *thirdParty* field included in submissions metafile, from conditional to optional
			Added Appendix H – File Feedback Scenarios
2.2.1 r1	10/28/2019	Consolidated Audit Trail, LLC	Applicable Schema Version: 2.2.1
			Corrected errors within the document.
			Corrected/Updated references to other sections within the spec.
			Added *marketCenterID* as a TRF linkage key, and included validation requirements for populating this field.
			Added *handlingInstructions* value 'FS' (Suspend) requested by the industry for 2a reporting.
			Clarified other values in the Data Dictionary.
			Updated Sections 6 & 7 clarifying JSON requirements for file submission and managing schema changes;
			Updated Section 7 to clarify feedback format for JSON formatted ingestion data errors.
			Added new error codes, updated existing error codes, and removed redundant error codes in Appendix E.
			Added validation requirements to Sections 4 & 5 that are located in other areas of the document.
			Clarified requirements for MEOJ and MOOJ events to address industry questions.
			Added Se/ction 3.1.5 clarifying that CAT Reporter IMID for ATSs must be the FINRA ATS MPID, added information about how to report NBBO Source changes (outside of spec), and clarified validations for ATS fields.
			Greyed/Ungreyed fields and values (*handlingInstructions* value ALGMod, *receivedQuoteID* on MEQR, *manualFlag* in options events) to clarify 2a/2c reporting requirements.
2.2.1 r2	12/9/2019	Consolidated Audit Trail, LLC	Applicable Schema Version: 2.2.1
			Added *destination* and *senderIMID* value 'LTSE'.
			Added *timeInForce* value 'IOR'.
			Added *handlingInstructions* values 'FB', 'GVWAP', 'NAV', 'UNS', and 'UNP'.
			Updated preface language.
2.2.1 r3	1/31/20	Consolidated Audit Trail, LLC	Applicable Schema Version: 2.2.1
			Updated and removed error codes.
			Clarified requirements for *eventTimestamp* in MEOC, MOOC, MEOM, and MOOM events.
			Clarified CAT Submitter ID requirements in Section 2.2.1 and the Glossary.
			Clarified how CAT Submitter ID should be populated in Table 50.
			Clarified requirements for population of *marketCenterID* and *reportingExceptionCode* in MEOT event.
			Clarified requirements for population of *parentOrderID* in MEIR and MOIR events.

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			Clarified error code 2045 and requirements for population of *minQty*
			Clarified error code 2040 and requirements for population of and *leavesQty* fields.
			Clarified Quote events may populate bidQty, askQty, bidPrice and askPrice >= 0
			Clarified that File Names, Field Names and Field Values are case sensitive.
			Corrected data definition for Timestamp and Text
			File Name formats in 6.1.1 #1 and #2 corrected to include File Instruction as per Table 47.
			Corrected JSON Format Example in Section 2.5.1, 6.1.2.1 and 7.4.3
			Corrected CSV examples in 7.6.1.2 and 7.6.2.2
			Corrected File Integrity Examples in 7.3.2 and 7.3.3 to indicate 'Success' feedback for Metadata Files is not applicable.
			Clarified definition of *handlingInstructions* values 'UNS' and 'UNP'.
			Eliminated *handlingInstructions* values 'WCO' and 'PSO'.
			Corrected definition of *nbboSource* in the Data Dictionary to match content in Section 3.1.
			Clarified requirements for populating NBBO Fields.
			Clarified requirements in Appendix C for populating *representativeInd* and *fulfillmentLinkType* value "YF".
			Updated section 2.4.1 and 2.5.1 for the population of Industry Member Identifiers to align in the updated CAT Alert 2018-003.
			Updated section 7.5 to add the definitions of Unlinked Named Error Feedback as per CAT Alert 2019-004.
			Corrected section 7.5.1 for feedback of unlinked events reported by the CAT Reporter.
			Updated section 6.3.1 to eliminate the archive folder and feature of archiving FTP submissions for 10 days.
			Updated 7.1.2 and 7.5 to indicate that when no Linkage Errors are found in Linkage Discovery, an empty file will be returned with the filename ending in .success
			Updated requirements for populating the value portion of the 'AucResp' *handlingInstructions* value.
2.2.1 r4	4/21/20	Consolidated Audit Trail, LLC	Applicable Schema Version: 2.2.1
			Added *destination*, *marketCenterID,* and *senderIMID* values for Miami Pearl Equities.
			Added *destination* value for LTSE.
			Added new error codes 2189 and 2190.
			Updated requirements for Data Type Boolean case sensitivity.
			Updated requirements for Data Types Real Quantity and Whole Quantity that values must not be negative.
			Updated Section 6.1.2.1 and Data Type Text with guidance for populating values which contain a JSON Reserved Character.
			Clarified requirements for Data Type Timestamp and when to adjust for Eastern Time.
			Clarified requirements for populating *parentOrderID* and

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			priorOrderID in sections 4 and 5.
			Clarified requirements for population of *marketCenterID* and *reportingExceptionCode* in the MEOT event.
			Clarified instructions for populating the *exchOriginCode* in the Data Dictionary.
			Clarified requirements for populating *handlingInstructions* values PEG, DISP and DISQ in the Data Dictionary.
			Updated Section 7.6.4 and Appendix H examples to remove integrity feedback on delete file instruction.
			Clarified requirements for populating *File Number* in Sections 6 and 7.
			Updated Section 2.3.1 with guidance from FAQs B2 and B8.
			Updated Sections 2.4.1 and 2.6.3 with content from CAT Alert 2018-003 and 2018-004.
			Updated Section 3.2 with guidance from FAQs B48 and K13.
			Updated and clarified requirements for Data File submission in section 6.1.4.
			Defined process for a Revision in section 6.1.5
			Updated *errorType* value in Table 69 to "ERTRF" to conform to Alphanumeric (5).
			Updated references of "CBOE User Acronyms" to "Cboe EFIDs"
			Corrected 'Stage' requirements in Tables 58 and 61.
			Corrected CSV example in Section 6.1.3.2
2.2.1 r5	5/18/20	Consolidated Audit Trail, LLC	Applicable Schema Version 2.2.1
			Added *handlingInstructions* value 'DAC'.
			Updated Table 1.
			Retired Error Codes 894-896, 898-899, and 3008-3009.
			Added Error Code 2191, 6013, 6015, 8013 and 9013.
			Updated requirements for Error Code 2190.
			Clarified Warning Codes 397 and 398.
			Updated the definition of *reportingExceptionCode* "P" in the Data Dictionary.
			Clarified Linkage Key uniqueness requirements in Section 2.6 and throughout the document.
			Clarified linkage discovery process in section 7.5.1.
			Corrected example #6 in section 7.1.2.
			Updated CSV examples in Appendix H to remove integrity feedback on delete file instruction to be consistent with JSON examples.
			Added new hyperlinks throughout the document.
			Corrected terminology used throughout the document for consistency.
2.2.1 r6	6/22/20	Consolidated Audit Trail, LLC	Applicable Schema Version: 2.2.1
			Updated requirements for TRF Linkage Key and *tapeTradeID* uniqueness.
			Removed requirement that minQty must be less than or equal to quantity.

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			Updated error codes 4005 and 5006
			Added error code 4011.
			Added *destinationType, senderType,* and *marketCenterID* values for Members Exchange
			Clarified definition of *eventTimestamp* in the MENOS and MONOS events.
			Clarified definition of *tradingSession* 'ALL'
			Clarified requirements for re-use of a *firmROEID* after file deletion in section 7.6.4.
			Removed *handlingInstructions* value 'OET'.