



NYSE Common Customer Gateway (CCG)

FIX Specification and API

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Revision History

Date	Version	Updates
March 17, 2009	3.9	<ol style="list-style-type: none"> 1. Tag 438 will be returned in HHMMSS from CBS (already in production). 2. Value of "OCX" has been removed from tag 9487. 3. "Replaced" messages in a cancel replace chain will have the replacement quantity appear in tag 38. 4. Text in tag 58 for Cancel Replace response changed to "Replaced". 5. Tag 151 will have the current leaves quantity in "Replaced" messages. 6. In "Replaced" messages, tag 37 will be returned with the ClOrderID of the cancel replace request. 7. Tags 17 and 19 have new Activity ID format as optional on a session basis with the implementation of CCG version 3.2. 8. Changed Table 28 to reflect tag 58 text to be "Replaced" as a response to a cancel replace request, instead of "UR OUT". 9. Tag 59 updated to include text "GTC and GTX are not supported when using direct routing to a Broker's Handheld device." 10. Tag 63 will no longer support values other than "0". 11. Tag 64 will no longer be supported. 12. Tag 111 now supports value of zero. 13. Removed all NYSE unsupported FIX tags from Appendix A. 14. Added overview in section 1.3 describing NYSE CCG Certification testing procedures. 15. Links to the documentation describing system enhancements for SDBK and CCG: http://www.nyse.com/pdfs/NYSETECH_INFOMEMO022609.pdf http://www.nyse.com/pdfs/022009TradingTechInfoMemo-SDBK.pdf http://www.nyse.com/pdfs/SDBKImplementationNotice_20090327.pdf
April 1, 2009	4.0	Document Specification format change.
May 29, 2009	4.1	<ol style="list-style-type: none"> 1. Added tag 41 to Execution Report section 7.6. 2. Added note to sections 3.3 and 4.3 "Arca symbols routed through CCG will not return tags 9570 and 9578 on execution reports." 3. Section 3.2 – changed GTX description. 4. Added note to tag 18 in sections 7.1, 7.6 and Appendix A that states "If DNI or DNR is present on an order with a time in force other than GTC or GTX, SDBK shall reject." 5. Added new field description in tag 9570 for NYSE MatchPoint executions: N = New York (routed to NYSE MatchPoint). 6. Added a value of [3] in tags 39 and 150 representing "Done for Day" in sections 7.6 and Appendix A. 7. Changed tag 41 values in cancel reduce message table (section 7.2) to reflect the original ClOrderID. 8. Added note to Tag 9487 in sections 3.3 and Appendix A that states "ISO, DNS & SOC routing instructions are not valid on odd lot orders." 9. Added tags 57 and 143 as conditionally required for cancels and replaces of BBSS/CBS orders in section 7.2, 7.3 and 7.4 and in Appendix A. 10. Added a description of BBSS and CBS order routing to section 3.

September 4, 2009	4.2	<ol style="list-style-type: none"> 1. Added tag 141 to Appendix A. 2. Added comment to BBSS/CBS Order Routing Section 3.3: "GTC Time in Force is not valid for orders routed to BBSS and CBS". 3. Added comment to Section 4.3 re: Routing Arca symbols through CCG: "Please note – Cancels of Arca orders routed through CCG must be sent on the same FIX session as the original order. 4. Added comment to Section 7.2 – "Please note – If a cancel replace request is received at the same time the original order is being executed, it is possible to receive a "Replaced" message (tags 39 and 150 = 5) with a zero leaves quantity (tag 151=0)." 5. Added tag 111 to Section 7.4. 6. Added comment to Section 7.4 - Cancel Replace of an oddlot portion of a PRL (Partial Round Lot) is not permitted. 7. Added value of "3" to tag 102 representing "order is already in pending cancel or pending replace status." 8. Added value of "9" to tag 9578 representing "Oddlot execution." 9. Added comment to Tag 111 – "This tag not valid for orders routed to BBSS or CBS." 10. Removed values "5" and "6" from tag 57. 11. Added value "CO" to tag 9487 representing Closing Offset Order type and added note – not valid for Nasdaq securities. 12. Added note to tag 9487 stating "ISO, DNS, SOC and CO routing instructions are not valid for Odd Lot orders." 13. Added comments to Section 3.3 and tag 38 – CBS will support order size of up to 99,999,900 shares. BBSS and SDBK will support order size of up to 6,500,000 shares. 14. Added values 1 (Cash), 2 (Next Day) and 8 (Sellers Option) to SettlementType tag 63 and comment "If 63=8, then tag 287 must also be present". 15. Added tag 287 throughout document. 16. Added Section 4.4 – NYSE Amex Supports Nasdaq Equity Securities. 17. Added Closing Offset (CO) order type to Section 8 NYSE Equities Order Types. 18. Added tags 143 and 57 to Cancel and Cancel Replace sections 7.3 and 7.4 respectively. 19. Changed the "Required" status on numerous tags to be "C" (conditionally required). 20. Changed tag 151 description – Leaves Quantity on order acknowledgements will now reflect the true leaves quantity and not a value of zero. 21. Added Section 4.4 describing CCG Routing to NYSE MatchPoint. 22. Updated Tag 9570 to include new values J and K for Direct Edge A & X respectively. 23. Added note to tag 40 – Values 5, A and B are not valid for Nasdaq securities.
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February 8, 2010	4.3	<ol style="list-style-type: none"> 1. Changed Section 1.4 heading from “SDBK Phase 2 Future Enhancements” to “Future Enhancements.” 2. Section 1.4 – deleted “Done for Day” message and Expanded Account <Tag 1>. Added Trading in Shares. 3. Changed section 1.4 description paragraph. 4. Section 1.2 – deleted 2nd paragraph and added same content to Section 1.4. 5. Added value of “Y” to tag 9570 representing BATS Y. 6. Removed “All Oddlot executions will contain a value of 3 or 7.” From section 3.3, Liquidity Indicator Tag 9578 description. 7. Added paragraph to section 3.3 detailing new “Done For Day” message. 8. Added new tag 9426 BillingRate to Section 7.6 and Appendix A. 9. Added note to 7.6 and Appendix A for Tag 1 – “will not be returned on BBSS executions” and “will be truncated to 12 characters on execution reports of Arca primary symbols. 10. Added comment to tag 151 – “Please note: this tag will not appear on Pending Replace messages.” 11. Added tags 102 and 103 to Section 7.6 and Appendix A. 12. Removed Stop Limit from Section 8. 13. Changed sentence in Section 8, Dark Reserve Order Description from “All dark reserve orders will be rejected prior to the open...” to read “All dark reserve orders entered prior to the open will receive an unsolicited cancel....” 14. Removed “Valid values A through Z” from tag 47 description and added “Reference Appendix B for valid values.” 15. Added paragraph and chart to Section 3.3 detailing new BillingRate tag 9426. 16. Added chart to Drop Copy section 4.6 explaining message types that will/will not be sent on drop copy sessions. 17. Added Closing Offset to section 4.2. 18. Added value of “1” to tag 57 throughout document. 19. Changed tag 59 to be “Required=Y” throughout document. 20. Added StatusResp tag 9425 to Execution Report Section 7.6.
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June 3, 2010	4.4	<ol style="list-style-type: none"> 1. Removed "Trading in shares" from Section 1.4. Trading in shares is now available. 2. Added SBS to Section 2 in the diagram and legend, replacing SuperDOT. 3. Updated phone number information for the Connectivity and Firm Testing groups in Section 1.2. 4. Removed references to odd lots and PRLs. 5. Removed tag 40 value of 'A'. 6. Added verbiage "1 to 4 numeric characters" to the first sentence in the BBSS/CBS Order Routing paragraph in Section 3.3. 7. Removed "Market on Close (Odd Lots)" description in Section 4.2. 8. Corrected Drop Copy Message Type in Section 4.6. Replaced messages contain 39=5. 9. Removed "SDOT will return HHMM only" from tag 438 Values column in Appendix A. Added "This is displayed in Eastern Standard Time" to the current description. 10. Updated description field for tag 111. 11. Updated tag 373 value of '9' with supplemental information. 12. Changed the name of tag 9429 from "CMSLeavesQty" to "NewOrdQty." 13. Changed the name of tag 9430 from "NYSEDirect+" to "AutoExInd" and updated the description. 14. Changed the description of tag 57 for the value of 7 from NYSE Direct (NX) to "autoex". 15. Removed reference to tag 9423 in the description field for tags 375 and 437. 16. Updated tag 1 information. This tag is now returned on acks, replaces, and executions. 17. Removed indentation for tags 375, 337, 437, and 438 since they are no longer part of a repeating group.
July 23, 2010	4.5	Add Sell Short Exempt as valid order side in Tag 54 <Side>.
September 2, 2010	4.6	<ol style="list-style-type: none"> 1. Removal of GTX Time-in-Force throughout document. 2. Added Cancel on Disconnect description to Section 4.8. 3. Added Trading in Shares description to section 4.9. 4. Changed description of Tags 95 and 96 for Cancel on Disconnect feature in Sections 5 and Appendix A, and made them conditionally required in Section 5. 5. Changed maximum order quantity to be 25,000,000 to all NYSE systems in Section 3.3 and Tag 38 throughout document. 6. Removed Cancel on Disconnect as a Future Enhancement in Section 1.4. 7. Changed tags 9428 and 9429 to no longer have the restriction that they must contain roundlots.
October 5, 2010	4.7	<ol style="list-style-type: none"> 1. Changed MOC/LOC wording to reflect "3:45-3:58 no cancels or reductions unless for legitimate error. After 3:58, no cancels or reductions at all" in Section 4.2. 2. Changed Billing Rate liquidity indicator chart to reflect new values in Section 3.3.

November 5, 2010	4.8	Updated valid values in Tag 9570 <ExecAwayMktId>.
March 1, 2011	4.9	<ol style="list-style-type: none"> Updated note to Tag 40 stating only value of 2 "Limit" is valid for Nasdaq orders to the NYSE Matching Engine, and values 1" Market" or 2 "Limit" for Nasdaq orders to the Broker Systems. All other values are invalid for Nasdaq securities. Effective 2/28/11 the NYSE decommissioned the MatchPoint facility. MatchPoint references were removed in this document.
June 17, 2011	5.0	<ol style="list-style-type: none"> Took out references to the ttCert test environment from section 1.3. ttCert is no longer supported. UAT remains available. Updated descriptions and verbiage for tags 21, 49, 76, and 9433. Added description for new tag 109 <ClientID> to Sections 7.1, 7.4, 7.6.
October 24, 2011	5.1	<ol style="list-style-type: none"> Added Section 4.10 for new order type: Retail Orders. Added new conditional Tag 9403 <OffsetPrice>, to MsgType 'D' and 'G' (Sections 7.1 and 7.4) and Appendix A. Added new values to Tag 9487 <Routing Instruction> to MsgType 'D' and 'G' (Sections 7.1 and 7.4), Section 8, and Appendix A. Removed Tags 49, 50, 52, 57, 115, 143 from MsgType 'D'. Removed Tags 57 and 143 from MsgType 'F' and 'G' (Sections 7.3 & 7.4). Removed Tag 142 from MsgType '8' (Section 7.6). Updated Firm Testing Group's contact number in Section 4.6. Added two new values to Tag 9578 <BillingIndicator>. Updated description for Tag 142. Updated Drop Copy Application, Section 4.6. Added new value, 99, to Tag 103. Removed Tag 21 from Sections 7.1, 7.4, and Appendix A. It is not a required tag.
January 26, 2012	5.2	<ol style="list-style-type: none"> Section 3.3, updated BBSS/CBS Order Routing description. Distinguished max order size to Display Book versus BBSS and Broker Handhelds, updated tag 38 throughout the doc. Section 4.6, updated the message types that will not drop copy. Deleted 39=A, which does not exist. Modified 39=3 to 'Done For Day.' Section 4.10, updated the description for Retail Orders. Moved 'Done For Day Subscription Service' from Section 3.3 to Section 4.11 and updated the description. Sections 7.1, 7.4 & Appendix A, decreased the OffsetPrice "greater than or equal to" value from 0.0020 to 0.0010. Updated tag 44 and tag 99 values. Section 7.6, updated tag 58 size to a max of 40 characters. Section 8, updated Retail Price Improvement (RPI) description. Updated Retail Taker order types (RTO, RTNR, and RTR) to include values 3 and 4 in tag 54. Updated SOC order type to include 59=0 as a valid value. Updated descriptions throughout the document for RPI, RTO, RTNR, and RTR orders.

August 3, 2012	5.3	<ol style="list-style-type: none"> 1. Section 2, removed references to JCRS from the System Architecture diagram and Legend. Added UTP to the diagram and Legend. 2. Section 4.3, removed section information. The routing of NYSE Arca primary symbols through CCG to Arca was decommissioned on Feb 6, 2012. 3. Section 4.8, added Market On Open and Limit On Open order types to the list of those that will not be canceled as part of the Cancel On Disconnect service. 4. Added Section 4.12, Introduction of New Universal Trade Platform for NY Cash Equity Markets. Added Section 4.13, Gateway Throttle Mechanism. 5. Sections 7.1, 7.4 & Appendix A, added tag 110, MinQty. 6. Section 7.6, updated descriptions for tags 6, 14, and 375. 7. Added Section 8, Failure Recovery. 8. The old Section 8, NYSE Equities Order Types is now Section 9. Updated descriptions in Section 9: <ol style="list-style-type: none"> a) Added "Minimum Trade Size Order" as a new order type. b) Removed requirement for Retail Taker orders to mandatorily contain 59=3 when sending 40=1. All Retail Taker orders are already treated as IOC. 9. Appendix A, updated descriptions for tags 6, 14, 65, and 375. Removed tag 100. 10. Removed references to CCG-to-Arca routing throughout the document. CCG no longer routes to Arca. Removed value of 'P' from tag 30 (LastMkt) and tag 207 (SecurityExchange) descriptions. 11. Updated tag 52, 60, and 122 descriptions throughout the document. Removed references to UTC (Universal Time Coordinated) and replaced with the synonymous term, GMT (Greenwich Mean Time). 12. NYSE Amex LLC (aka NYSE Amex Equities) was renamed to NYSE MKT LLC on 5/10/2012. The name change has been updated throughout this document. 13. Corrected various typos and spacing issues throughout the document.
October 5, 2012	5.4	Revised Appendix B with updated Order Capacity account type descriptions
February 1, 2013	5.5	Incorporated changes in support of new Self-Trade Prevention and Client ID (MPID) designations for incoming orders and cancel replacement messages.
May 3, 2013	5.6	<p>Added changes in support of Self-Trade Prevention Phase 2</p> <ul style="list-style-type: none"> • Accept STP designation on Market and Stop Orders • Removed all references to SDBK now that UTP migration has been completed • Updated system diagrams to remove SDBK
August 14, 2013	5.7	Added changes in support of Mid-Point Passive Liquidity order (MPL), Add Liquidity Only order (ALO).

November 15, 2013	5.8	Updated drop copy description to include new service to support multiple drop copy destinations.
February 25, 2014	5.9	Updated Bulk Cancel / Block / Unblock functionality support. <ul style="list-style-type: none"> - Added Appendix C with new Bulk Cancel, Bulk Cancel & Block, Bulk Block and Bulk Unblock codes for Tag 37 <OrderID> - Added new Order Reject Reason Codes in Message 8 - Added new Cancel Reject Reason Codes in Message 9.
October 13, 2014	5.10	<ul style="list-style-type: none"> - Changes in support of expansion of ALO Modifier and Day time in force for ISOs
February 26, 2015	5.11	Updated version in support of: <ul style="list-style-type: none"> - Added new MEOrderID Tag 9421 to Message Type 8 - Unsolicited Ack Subscription in Logon Message - Support new Billing Rate values 13 and 14. - Miscellaneous field level clarifications
January 27, 2016	5.12	<ul style="list-style-type: none"> - Removed support for Stop orders and Good Till Cancelled (GTC) orders. As previously communicated through Trader Update notifications, NYSE and NYSE MKT will no longer accept these orders beginning February 26, 2016 - Clarification to ClOrdID Tag - Clarification that a Minimum Trade Size Order must be designated with a Time in Force of "IOC"
July 15, 2016	5.13	<ul style="list-style-type: none"> - Added ExecInst (18) = y to designate Trade-at ISO order - Updated Appendix B: OrderCapacity values
March 23, 2017	5.14	<ul style="list-style-type: none"> - Removed support for Buy Minus and Sell Plus orders - Removed support for NYSE MKT trading of symbols on an Unlisted Trading Privilege basis - Replaced references to CBS/BBSS with Broker UTP
September 5, 2017	5.15	Removed support for NYSE MKT Equities (transitioned to NYSE American on Pillar trading platform with Pillar gateways).
September 14, 2017	5.16	Added new BillingIndicator/BillingRate value 4 (Market on Close and Market Orders Executed in Close); redefined BillingIndicator/BillingRate value 7 as Limit on Close; added new BillingRate value 15 (Closing Offset).
October 16, 2017	5.17	<ul style="list-style-type: none"> - Added Section 3, "Pillar Trading Platform for Tape B&C Symbols" - Added notes on field and value changes to be expected for symbols migrated to Pillar throughout the spec - Added Appendix D, "Pillar Reason Codes"
March 7, 2018	5.18	<ul style="list-style-type: none"> - Updated description for BillingRate (9426) value 6 and added new values 16 and 17 - Updated description for BillingIndicator (9578) value 6
March 28, 2018	5.19	Added new sub-section, "NYSE Pillar Risk Mitigation" (Section 5.4; Cancel on Disconnect).

April 3, 2018	5.20	Corrected reference time to 3:57 PM/3 minutes before the close - BillingRate (9426) values 6, 16 and 17; BillingIndicator (9578) value 6.
November 19, 2018	6.0	<p>Added support for migration of Tape A securities to NYSE Pillar. Updates to:</p> <ul style="list-style-type: none"> - Max Order Quantity - Max Order Price - introduction of new Symbol/XDP Price Scale 3 in addition to existing Price Scales 4 and 6 - For BRK A, updated maximum Price Scale to 3 when migrated to Pillar (on UTP, max Price Scale remains 2) - MOC/LOC order entry cutoff time / Closing Auction Imbalance Freeze - Retail Liquidity Program - for all securities (Tapes A/B/C), RPI and Retail Only Limit orders available beginning on a date announced via Trader Update. Retail Only Market Order, Retail Non-Routable Order, and Retail Routable Order continue to be rejected in Pillar - Closing Offset Order - added support for Tape A securities on Pillar - New beginning on a date announced via Trader Update - Support for Minimum Fill order instructions (via MinimumTriggerVolume) on following order types - MPL, Limit IOC, Dark Reserve Order - New beginning on a date announced via Trader Update - Support for Minimum Trade Size (via MinQty) or Minimum Fill order instructions (via MinimumTriggerVolume) on following order type - Dark Reserve Order - New beginning on a date announced via Trader Update - Added new BillingRate = 18 for "Participated in NYSE Floor Broker Cross execution) - Appendix "NYSE Pillar Reason Codes" - added new reason codes R169+ <p>In section, "NYSE Equities Order Types" - added details regarding existing Pillar validations, copied from "functional differences" document (see link below):</p> <ul style="list-style-type: none"> - Minimum Trade Size Order - Block Reserve Order and Dark Reserve Order - Intermarket Sweep Order (ISO) and Intermarket Sweep Order Add Liquidity Only (ISO ALO) - Midpoint Passive Liquidity Order (MPL) <p>For functional changes to various order types that will take effect for symbols migrated to NYSE Pillar, please see: Functional Differences between NYSE Group Equities Platforms.</p>
January 14, 2019	6.1	<p>Added detail regarding existing Pillar validation, copied from Functional Differences between NYSE Group Equities Platforms - Account field limited to 20 characters, else value is truncated.</p> <p>Clarification for BRK A migration to Pillar - max order price for this Tape A symbol, which will have an XDP Price Scale of 3 once migrated, will continue to be limited to 2 decimals to the right of the digit instead of 3 - \$999,999.99 (same as UTP).</p> <p>Appendix D, "NYSE Pillar Reason Codes" - updated text for R065 to "Invalid InterestType"; R070 to "Invalid DOrderAuctionPrice."</p>

March 29, 2019	6.2	<p>Appendix “Pillar Reason Codes” - updated text for codes 171, 200, 207, 211; added codes 900+.</p> <p>Billing Rate (9426) - added note that value 10 (RLP - Retail Taker MPL) not supported for symbols migrated to Pillar.</p> <p>Removed references to the old time for MOC/LOC order entry cutoff / Closing Auction Imbalance Freeze. Effective April 1, 2019 it will be 3:50 PM Eastern.</p>
August 3, 2020	6.3	<p>ExecAwayMktId (9570) and Billing Rate (9426) - added new codes H = MIAX, L = LTSE, U = MEMX</p> <p>NYSE Pillar Reason Codes (Appendix) - added new codes 200, 223-226.</p>

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1 Overview

1.1 About this Document

This document describes the implementation of the FIX 4.2 Protocol on the New York Stock Exchange via the NYSE CCG FIX Gateways.

This document assumes the reader thoroughly understands the FIX 4.2 protocol available at <http://www.fixprotocol.org/>. This document is not intended as a guide to constructing a FIX client. Rather, it is a checklist to ensure that a firm's FIX client, constructed according to the FIX 4.2 specifications, will be compatible with the NYSE CCG FIX Gateway.

1.2 About the NYSE CCG FIX Gateway

NYSE CCG is the Common Customer Gateway application that is designed to be the strategic entry point for any user planning to transact business with any NYSE Group system in FIX protocol format. CCG provides access to NYSE equities. For CCG production questions, please contact the Connectivity Team by [e-mail](#) or call (212) 896-2830 Option 2, Sub-Option 1. For UAT test environment questions, please contact NYSE Technology Member Services by [e-mail](#) or call (212) 896-2830 Option 2, Sub-Option 2.

1.3 NYSE CCG FIX Certification

The UAT (User Acceptance Test) environment is a set of systems which duplicates what exists in production, and uses production software versions. Orders entered through CCG will be sent to our Trading Engine UTP for processing.

Send [email](#) to NYSE Technology Member Services to obtain connectivity and procedure information.

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Follow the prompts for menu options.

1.4 Future Enhancements

Future enhancements and/or modifications may require system changes for your firm. Please refer to the NYSE webpages at <https://www.nyse.com/markets/nyse/notices> and <https://www.nyse.com/markets/nyse/market-info> to obtain the latest Technology Member Firm Notifications and specification documents.

To automatically receive these notifications by email, you can register at <https://www.nyse.com/subscriptions> or contact your NYSE Relationship Manager.

2 System Architecture

Each client sends orders to its assigned session on the NYSE CCG FIX Gateway. The NYSE CCG FIX Gateway then routes each order to the appropriate destination depending on the tag values contained in the order.

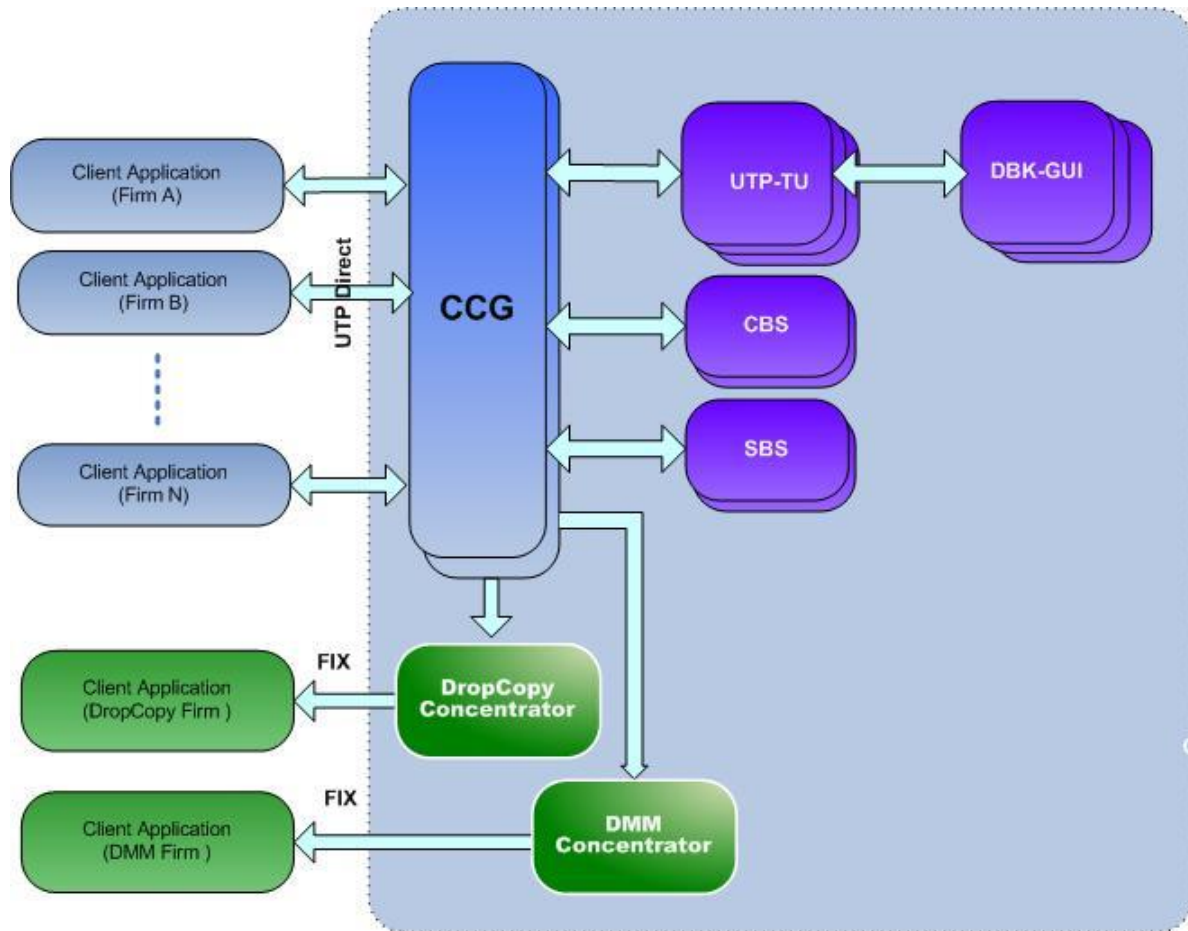


Figure 1: NYSE Classic – CCG FIX Architecture

Legend	
Abbreviation	Full Name
BBSS	Broker Booth Support System
CBS	Combined Broker Systems
CCG	Common Customer Gateway
DBK GUI	Display Book Graphical User Interface
SBS	Super Broker System
UTP	Universal Trading Platform

3 NYSE Pillar Trading Platform

As of April 2018, four NYSE Group equities markets are trading on NYSE Pillar, our new integrated trading technology platform - including Tape B&C securities on NYSE. Phase V of the rollout will consist of migrating Tape A securities to NYSE Pillar matching engines. During this phase, customers will continue to connect to the existing NYSE CCG/Binary CCG (UTP Direct) gateways and use existing messaging protocols.

However, there are changes to certain order types and messaging that will go into effect on a symbol-by-symbol basis, as the NYSE Pillar matching engines are deployed. With regard to gateway messaging, the associated changes to FIX tags and values are indicated with notes throughout this gateway specification where applicable.

Please note that NYSE Pillar will enforce stricter validation of FIX tags rather than ignore them. Therefore, orders for symbols migrated to NYSE Pillar may not contain any FIX tags which are not outlined in this gateway specification. Such orders carrying unsupported FIX tags will be rejected.

For information on the functional changes to various order types that will take effect for symbols migrated to NYSE Pillar, please visit: <https://www.nyse.com/pillar>.

4 NYSE Equities Specific Information

4.1 Hours of Operation

Hours of Operation for NYSE Equities Exchange

For all symbols Tape A/B/C, NYSE accepts and acknowledges orders starting at 6:30 AM Eastern Time.

For Tape A Symbols:

- Opening Auctions – beginning 9:30 AM ET
- Core Trading Session – 9:30 AM – 4:00 PM ET
- Closing Auctions – beginning 4:00 PM ET

For Tape B&C Symbols:

- Local auctions are not conducted
- Early Trading Session – 7:00 AM – 9:30 AM ET
- Core Trading Session – 9:30 AM – 4:00 PM ET
- **IMPORTANT- Trading Session Eligibility:** this gateway does not support designation of trading session eligibility on orders. Instead, Pillar defaults trading session designation based on order type. Orders go live and are eligible to execute based on these defaults. Firms are responsible for managing their execution risk around the defaults.

For a list of order types with their default trading session designations, see the document [Functional Differences between NYSE Group Equities Platforms](#).

4.2 NYSE Defined FIX Fields

The following FIX fields have been added or created due to customer demand. They are used to assist customers in trade reconciliation and also for billing purposes.

LastMkt (Tag 30)

The FIX LastMkt field will be specified on execution reports. Values for this field:

- N – NYSE

The client may need this field for back office clearing and reporting purposes.

SecurityExchange (Tag 207)

Original/initial order information (start of the order chain). This tag designates the NYSE exchange to which an order or cancel replace request is to be sent. Valid values are:

- N – NYSE

CCG will route to the appropriate executing market center regardless of the value designated on incoming messages. CCG will return the actual handling market center on execution reports. This tag is required on all orders and cancel replace requests.

SelfTradeType (Tag 7928)

This optional tag allows the user to designate that the incoming order should be prevented from trading against another order with the same ClientId (MPID).

- N – STPN (Newest)– cancel arriving interest
- O – STPO (Oldest) – cancel resting interest

DBExecID (Tag 9483)

This tag contains a value that associates all buy and sell execution reports to the tape print in a Display Book transaction.

Value for this field: **6 Numeric characters.**

****For symbols migrated to Pillar – numeric string of up to 10 char; populated with the Pillar TradeID (unbundled, unique identifier provided to both sides of the trade).**

Routing Instruction (9487)

Per Reg NMS, the use of this tag will prevent certain orders from being sent to an away market center. If using tag 9487, tag 57 cannot also be present.

Valid values are as follows:

- ISO – Intermarket Sweep Order
- ISO ALO – Add Liquidity Only Intermarket Sweep Order
- DNS – Do Not Ship
- SOC – NMS IOC
- CO – Closing Offset Order ****For symbols migrated to Pillar – available for Tape A securities only**
- RPI – Retail Price Improvement Order ****For symbols migrated to Pillar – available beginning on a date announced via Trader Update**
- RTO – Retail Only Order ****For symbols migrated to Pillar – available beginning on a date announced via Trader Update as Limit only; Market not supported**
- RTNR – Retail Non-Routable Order ****For symbols migrated to Pillar – not supported**
- RTR – Retail Routable Order ****For symbols migrated to Pillar – not supported**
- ALO = Add Liquidity Only

ExecAwayMktId (Tag 9570)

This Tag contains the Market Center ID (see valid values below) and, optionally, the Market Maker ID separated by a slash (e.g., D/ABCD). **If this tag is present, you will not receive Tag 9578.**

Values for this field:

A = NYSE American
B = Nasdaq BX
C = NYSE National
D = FINRA ADF
F = Algo order executed at NYSE Group
G = Algo order executed Away
H = MIAX
I = International Securities Exchange
J = Direct Edge A (EDGA)
K = Direct Edge X (EDGX)
L = LTSE
M = NYSE Chicago
N = New York Stock Exchange
P = NYSE Arca Exchange
T = Nasdaq
U = MEMX
V = Investors' Exchange (IEX)
W = Chicago Board Options Exchange
X = Nasdaq PSX
Y = BATS Y

Z = BATS Exchange

Liquidity/Billing Indicator (Tag 9578)

BillingIndicator is a proprietary FIX field sent on execution reports by NYSE on trades to indicate what effect an order has had on the liquidity of the book. Clients' rates are determined by whether an order adds or removes liquidity from the book. **If this tag is present, you will not receive Tag 9570.**

The values that clients can expect to receive in this field are:

- 1 = Taker
- 2 = Provider
- 3 = Blended
- 4 = Market on Close and Market Orders Executed in Close
- 5 = Opening/Provider
- 6 = Closing customer execution, or dQuote executed in Close if received between 3:35 – 3:57 pm*
- 7 = Limit on Close
- 8 = RLP - Retail Order Provider
- 9 = RLP - Retail Order Taker

*For days on which the market closes early, this time will be adjusted accordingly (between 25 and three minutes before the close).

Billing Rate (Tag 9426)

BillingRate is a proprietary FIX field sent on execution reports by NYSE that consolidates all billing information, including away market information, into a single FIX Tag. This Tag combines current values of Tags 9570 and 9578 into one Tag and supports additional NYSE Displayed Liquidity information. The billing values in support of the Midpoint Passive Liquidity order type (MPL) and Retail Firm program will only be returned in this Tag.

Examples:

- a. Field may contain an Away Market Indicator with optional MMID separated by "/".
Example format = D/EDGA.

Or

- b. Field may contain Billing Indicator with optional billing tier separated by a "/".:
Example format = 2/2 (represents a report for less than 2000 shares that provided liquidity)
Example format = 11/3 (represents an MPL report for less than 5000 shares but greater than 1999 shares that took liquidity)

In addition to the Billing Indicators listed above, the following additional values may be returned in this Tag:

- 10 = RLP - Retail Taker MPL **For symbols migrated to Pillar – not supported
- 11 = Taker MPL
- 12 = Provider MPL
- 13 = RET – Retail Firm Provider
- 14 = RET – Retail Firm MPL Taker
- 15 = Closing Offset
- 16 = Closing early D-Quote (received prior to 3:35 PM)*
- 17 = Closing late D-Quote (received after 3:57 pm)*
- 18 = Participated in NYSE Floor Broker Cross execution

*For days on which the market closes early, these times will be adjusted accordingly (25 minutes before the close; three minutes before the close).

Displayed Liquidity Table:

Displayed Liquidity Categories	New Displayed Liquidity Indicator Values
0 Round Lots	"0"
Greater than 0 and less than 1 round lot (1-99 shares)	"1"
From 1 to less than 20 round lots (100-1,999 shares)	"2"
From 20 to less than 50 round lots (2,000-4,999 shares)	"3"
From 50 to less than 100 round lots (5,000-9,999 shares)	"4"
From 100 to less than 200 round lots (10,000-19,999 shares)	"5"
From 200 round lots and up (20,000 shares or more)	"6"
Reserved for future use.	"7" – "9"

**For symbols migrated to Pillar – the billing indicator portion of the BillingRate tag (9426) will continue to be populated. However, the second part, DisplayedLiquidityIndicator, will not be populated, except for non-displayed executions, which will receive "/"0"

Broker UTP Order Routing

Routing orders to NYSE Broker UTP requires the use of FIX tag 143, indicating the 2-character Agency code or the Broker Badge number, 1 to 4 numeric characters, of a Floor Broker. The ClientID, a 4 byte alpha numeric value representing the firm's Market Participant ID (MPID), FIX tag 109, is also required. If routing to Broker UTP, tag 57 must be present and contain a value of "4". Tags 143 and 57 (tag 57 required for Broker UTP only) must also be present when sending a Cancel, Cancel Replace and/or Cancel Reduce message against an order that was routed to Broker UTP. You will not receive either tags 143 or 57 on any NYSE outbound message to you, including acknowledgements for Orders, Cancels, Cancel Replaces, Cancel Reduces, all Execution Reports, Names Later and Price Corrections and Busts. Broker UTP and Broker Handhelds can accept orders of up to 99,000,000 shares.

5 NYSE Equities Information

5.1 NYSE Equities Symbolology

Orders for instruments with suffixes (different classes of stock, preferred stock, etc.) can be sent in the following way:

- Symbol and Suffix notation (i.e. 55=VIA 65=B, 55=AA 65=PR and 55=IBM 65=PRA)

The FIX field for symbol suffixes is SymbolSfx (Tag 65). On all execution reports, symbols will be reported in Symbol and Suffix notation.

Symbolology Reference for NYSE Equities

Security Categorization	NYSE Symbol Suffix (Tag 65)
Called	CL
Class A	A
Class B	B
Class A Called	ACL
Class B Called	BCL
Class A When Issued	AWI
Class B When Issued	BWI
Convertible	CV
Convertible Called	CVCL
Class A Convertible	ACV
Class B Convertible	BCV
Preferred	PR
Preferred Class A	PRA
Preferred Class B	PRB
Preferred Class A Called	PRACL
Preferred Class B Called	PRBCL
Preferred Class A Convertible	PRACV
Preferred Class B Convertible	PRBCV
Preferred Class A When Issued	PRAWI
Preferred Class B When Issued	PRBWI
Preferred When Issued	PRWI
Preferred Class A When Distributed	PRAWD
Preferred Class B When Distributed	PRBWD
Preferred When Distributed	PRWD
Partial Paid	PP
Rights	RT
Rights When Issued	RTWI
Units	U
Warrants	WS
Warrants Class A	WSA
Warrants Class B	WSB
Warrant When Issued	WSWI
When Distributed	WD
When Issued	WI

5.2 Opening and Closing Auction Orders

NYSE offers both opening and closing auctions for **NYSE Listed Symbols only**. The schedule for these auctions is listed below.

- **Opening Auction - 9:30 AM EST**
- **Closing Auction - 4:00 PM EST**

To place an order for the opening auction specify TimeInForce (59) =2 (at the opening).

- Market on Open:

Orders must be submitted before the specified securities Opening Trade (typically, **9:30am** EST) and the FIX New Order Single (35=D) Message **MUST** contain the following Tags in order to be included in the Opening Auction:

OrdType (40) = 1 (Market)
TimeInForce (59) = 2

- Limit on Open:

Orders must be submitted before the specified securities Opening Trade (typically, **9:30am** EST) and the FIX New Order Single (35=D) Message **MUST** contain the following Tags in order to be included in the Opening Auction:

OrdType (40) = 2 (Limit)
TimeInForce (59) = 2

Closing Auction

To place an order for the closing auction, specify OrdType (40) =5 (Market on close) or OrdType (40) =B (Limit on close).

- Market on Close:

Orders must be submitted before **3:50pm EST (unless the order is taking the opposite side of a published Regulatory imbalance)** and the FIX New Order Single (35=D) Message **MUST** contain the following Tags in order to be included in the Closing Auction:

OrdType (40) = 5 (Market On Close)
TimeInForce (59) = 0

- Limit on Close:

Orders must be submitted before **3:50pm EST (unless the order is taking the opposite side of a published Regulatory imbalance)** and the FIX New Order Single (35=D) Message **MUST** contain the following Tags in order to be included in the Closing Auction:

OrdType (40) = B (Limit On Close)
TimeInForce (59) = 0

- Closing Offset **For symbols migrated to Pillar – available for Tape A securities only

The Closing Offset order is a day limit order to buy or sell and will be accepted up until 4:00 p.m., regardless of any imbalance or side of imbalance. CO orders provide liquidity to offset imbalances at the Close and execute at the closing price. CO orders will trade if marketable to fill any remaining imbalance and will yield to **all** other interest, except at-price “G” interest. Within the CO allocation, CO orders will be filled in time priority. CO orders on the same side of the imbalance will not participate. The FIX New Order Single (35=D) Message **MUST** contain the following Tags:

RoutingInstruction (9487) = CO (Closing Offset)

TimeInForce (59) = 0

Please note: NYSE systems will reject all cancel & cancel replace requests sent after 3:58pm for any MOC and LOC order, including orders that were entered to offset a previously published imbalance. Cancels or reduces sent between 3:50pm and 3:58pm may be sent **only** to correct a legitimate error.

5.3 Drop Copy Application

NYSE provides a service whereby firms can receive copies of Orders, Reports, ERCs, Cancels, Cancel Replaces, UR OUTs and/or Replaced messages for a given firm mnemonic. Drop Copy processing allows for the distribution of multiple drop copies by an Entering Firm. Entering firm mnemonic owners must subscribe via the current process of contacting Broker Services. Once subscribed, additional drop copy connections can be established so that more than one copy can be generated. The maximum is currently four and the default set up for all additional drop copy connections is 'reports only'. Each individual supplemental connection is given the ability to subscribe to the mix of messages they wish to receive. Filter criteria (orders, reports and/or admin messages) will remain and message acknowledgements will not be included for drop copy processing.

The number of connections per recipient is determined by the traffic the customer wishes to receive. For example, if CCG traffic only, the customer is required to establish a connection to each CCG Drop Copy Concentrator (currently 4). If BCCG traffic only, the customer is required to establish a connection to each BCCG Drop Copy Concentrator (currently 2). If a customer wishes to receive both CCG and BCCG message drop copies, the customer is required to connect into all 6 drop copy concentrators. The following chart displays the message types that can be received via drop copy:

Drop Copy Type Message Type

ORD CPY	35=D (Orders)
ORD CPY	35=F (Reduces)
ORD CPY	35=F (Cancels)
ORD CPY	35=G (Cancel Replaces)
ORD CPY	35=8 (Order Rejects)
ORD CPY	35=9 (Cancel Replace Rejects)
RPT CPY	35=8 (Reports/Executions)
RPT CPY	35=8 (ERCs)
ADMR CPY	35=8 (UROUTs)
ADMR CPY	39=5 (Replaced)

The following message types will not receive a Drop Copy:

Drop Copy Type	Message Type	Field/Value
ORDCPY	35=8	39=0 (New – Order Acknowledgement)
RPTCPY	35=8	39=3 (Done for Day)
N/A	35=8	39=6 (Pending Cxl)

Broker Systems Destined Orders

For customers who subscribe to Order Drop Copy services, these messages return the original order's "SenderCompID" (FIX Tag 49) in FIX Tag 50 (SenderSubID) on drop copy messages. FIX Tag 49 (SenderCompID) should be populated with the Drop Copy connection ID. For customers that populate Tag 50 (SenderSubID) on an incoming order, we overwrite this information on any Order Drop Copy message returned with the original order's "SenderCompID". In addition, for any orders entered directly into the NYSE Broker Booth Support System®, the "SenderSubID" field is not be populated.

Please note that the original order's "SenderCompID" will not be returned on any outgoing messages (specifically, Message Type = 8) from the NYSE received over a drop copy connection. This includes order acknowledgments, UROUT messages and reports. To request Drop Copy sessions, please contact the Connectivity Team by [e-mail](#) or (212) 896-2830 Option 2, Sub-Option 1. To request that a mnemonic be enabled for drop copy service, the owner of the mnemonic should contact Broker Services by [e-mail](#) or 212-656-5438.

5.4 Cancel on Disconnect

A FIX session can be configured to automatically cancel all open day orders if the firm's FIX session disconnects from CCG during that session. Firms can control this feature by way of Tags 95 and 96 in the logon message. The optional auto cancel upon disconnect service will only cancel open market or limit orders with a time-in-force of "Day" or "OPG" if prior to Market Open. Any Market "At the Close", Limit "At the Close" (MOC/LOC), or Closing Offset (CO) orders will not be canceled as part of this service.

For the purposes of this optional service, the NYSE will use the following criteria to initiate the auto-cancel service:

- a) loss of the physical or network connection to CCG detected; or
- b) failure to receive heartbeats within the specified heartbeat interval on an inactive session (See section 6.3 for further details); or
- c) upon receipt of a FIX Logout message (message type 5).

However, the NYSE will not initiate the auto-cancel service due to an internal NYSE CCG server outage or failure.

Members and member organizations should note that NYSE is providing this optional service as an alternative to the present manual process. Executions may occur at or about the same time that a firm experiences a disconnect, and before the auto cancel feature completes cancellation of open day orders. If this should occur, all executions occurring prior to the activation of the auto cancel feature will be valid, and any resulting execution reports will be returned to the firm along with any "UR Outs" upon re-establishing the FIX connection.

In order to take advantage of this service, please refer to Section 6.1 for further details.

NYSE Pillar Risk Mitigation

In the event a matching engine enters an unexpected state, the Pillar Risk Mitigation process will be triggered. Gateway users will receive unsolicited cancels on all live orders on the impacted matching engine, including MOO, LOO, MOC, LOC, with a reason code '168 – Pillar Risk Mitigation'. The impacted matching engine will initiate an automatic recovery during which period new orders will be rejected with a reason code '76 – System not available'. Once the resumption is complete, users will need to resubmit MOO, LOO, MOC, and LOC orders.

5.5 Retail Orders

****For symbols migrated to Pillar – Retail Price Improvement and Retail Only Limit orders supported (available beginning on a date announced via Trader Update). Retail Only Market Order, Retail Non-Routable Order, and Retail Routable Order are rejected.**

The NYSE has established a Retail Liquidity Program for customers. FIX customers may route Retail Price Improvement (RPI) orders or Retail Takers orders directly to the NYSE Matching engine with designated values in the Routing Instruction Tag (9487). Retail Orders destined to the Broker systems (NYSE Broker UTP and NYSE eBroker handheld™) will be rejected back to the originator.

Retail Price Improvement Orders provide potential price improvement to incoming order flow in the form of non-displayed interest that is better than the protected best bid/offer. RPI orders designate a minimum amount of price improvement by populating a new 'Offset Price' field in the new order message, and are designed to only execute with Retail Taker orders. The limit price and offset price must be submitted in multiples of the minimum price improvement value, currently set at \$0.0010. In addition, any RPI interest that would result in an execution below \$1.00 will be prevented from trading.

Retail Taker orders, which are treated as IOC interest, are available in three varieties:

1. Retail Only orders only interact with RPI Orders
2. Retail Non-Routable orders may interact with RPI interest and/or other interest on the Limit order book
3. Retail Routable Orders may interact with RPI interest, other interest on the Limit order book and/or can be routed away to other markets for execution

When RPI orders execute with Retail Taker orders, a new billing indicator value will be returned. Depending on the type of Retail Taker order, Retail Taker orders that execute with non-RPI interest will receive an existing billing value. For more information about Retail Orders please refer to Chapter 8 “NYSE Equities Order Types”.

5.6 Done For Day Subscription Service

A subscription based service that immediately returns an unsolicited “UROUT” message for all open “Day” orders as each individual security’s closing trade is processed. For securities that do not have a closing transaction, an unsolicited “UROUT” message will be returned at the designated 4:45 p.m. cutoff time. FIX tags 39 and 150 will contain a value of “3”. Firms interested in testing this new service can contact NYSE Technology Member Services by [e-mail](#) or call (212) 896-2830 Option 1, Sub-Option 2.

****For symbols migrated to Pillar –** Regardless of whether firms are subscribed to receive them or not, Done for Day messages are automatically sent for all open orders at the conclusion of the Core Trading Session.

5.7 Gateway Throttle Mechanism

In order to protect the Trading Engine from an overload of incoming messages, the CCG Gateway employs a session-level throttle mechanism. This is a configurable value currently set to 1000 messages per second on a rolling 1 second basis. In the event this throttle mechanism is activated, the gateway will slow the sending of incoming messages down to the Trading Engine during the throttle period (i.e. messages will be queued) so as to not exceed the defined message threshold.

5.8 Self-Trade Prevention Service

The NYSE offers a Self-Trade Prevention (STP) service. This service is designed to allow firms to better manage their order flow and prevent unintended executions with themselves. STP is currently available for limit orders, Market orders and Stop orders. Orders sent to Floor brokers that have the STP modifiers will be supported in a later phase

One of these two STP modifiers, along with matching ClientID’s (MPIDs), must be present on each order to prevent two orders from the same firm from trading with each other.

STP Cancel Newest (STPN)

- An incoming order marked with the STPN designation will not execute against opposite side resting interest that is also marked with the STP designation for the same ClientID (MPID). Instead, the incoming order or repriced order will be automatically cancelled back to the order originator. The resting order remains on the order book.

STP Cancel Oldest (STPO)

- An incoming order marked with the STPO designation will not execute against opposite side resting interest that is also marked with the STP designation for the same ClientID or MPID. Instead, the resting order will be automatically cancelled back to the order originator. The incoming order will then continue to auto execute or be placed in the order book.

5.9 Midpoint Passive Liquidity (MPL) Order

MPL Orders are un-displayed limit orders that are priced at the midpoint of the Protected Best Bid Best Offer (PBBO). Users of an MPL Order have the option of applying additional modifiers to the order type as well as interacting with all other order types. MPL orders do not participate at the Open, Close or in any manual trade. MPL orders can be sent directly to the NYSE Matching Engine.

5.10 Bulk Cancel Processing

The NYSE supports a bulk cancel message to allow customers to target multiple orders to cancel by firm mnemonic with a single cancel message. Customers are also provided with the ability to bulk cancel and block, bulk block or bulk unblock via a single message. In this phase, customers will have the ability to send a bulk action message to our Universal Trade Platform (UTP) that may include the cancellation of Broker System generated order messages for that firm mnemonic. In future phases, customers will be able to bulk cancel for an entire risk group and route bulk cancel messages directly to the NYSE Broker Systems. Member firms that currently utilize a Service Bureau for order submission will need to contact their service provider to determine when the technical changes outlined below will be supported.

The ability to take a bulk action will be supported via an extension of the existing Cancel message (message type “F”). Customers will be able to specify what action is to be performed by populating Tag 37 <OrderID> with a pre-designated value (Refer to Appendix C). Customers wishing to cancel any combination of orders types will be required to submit a bulk cancel message for each OrderID and mnemonic combination. UROUT messages for each of the orders that are canceled are sent through the connection in which the original order has been received.

5.11 MEOrder ID and Unsolicited Order Ack Subscription

In support of the NYSE Integrated Feed (IF) product, NYSE returns a unique Exchange generated order id (MEOrderID) populated on order acknowledgements and execution reports that can be used to match activity on the Integrated Feed. The Integrated Feed provides a comprehensive order-by-order view of events in the NYSE equities market. This single high-performance product integrates orders and trades in sequence, providing a more deterministic and transparent view of the order book and related activity.

There are times when a single order may have multiple MEOrderIDs assigned as size of the order changes. In these instances, the NYSE will return an additional, unsolicited order acknowledgement that contains the newly assigned MEOrderID. The return of these new unsolicited order acknowledgments is on a subscription basis by session at the time of login.

6 NYSE Message Format

6.1 Message Format Notes

The FIX message header defines the source and destination of the messages. To communicate with CCG the following should be observed:

- The FIX session is identified by the SenderCompID [49]. In FIX this can be any unique string generated by the source computer when the FIX session is initialized. SenderCompID[49] and OnBehalfOfCompID[115] are assigned by NYSE Technology Member Services and Connectivity Groups and are required fields.
- Inbound SenderCompID [49] holds the identifier of the user and the firm device; TargetCompID [56] holds the string |CCG|. Outbound the identifier in SenderCompID [49] is switched with the identifier in the TargetCompID [56] field.
- Outbound TargetCompID [56] holds the identifier of the user and the CCG Gateway; SenderCompID [49] holds the string |CCG|. Outbound the identifier in the DeliverToCompID[128] field is switched with the OnBehalfOfCompID[115].



FIX supports the encryption of messages (and of separate fields), but this form of traffic encryption is not currently supported by NYSE.

In order to provide maximum flexibility for its users, the FIX protocol accommodates *User Defined Fields*. This document introduces user-defined fields needed to accommodate CCG Order and Report functionality not handled in FIX. User Defined Fields with a value greater than 9999 are not accepted and only those tags registered on the www.fixprotocol.org website are accepted. This document also has semantic modifications to specific FIX fields for use with CCG.

6.2 NYSE Specific Order Identification Notes

The order originators and/or entering entities must populate ClOrdID[11] with an identification number that corresponds to the Branch Code and Sequence Number of the originator. The data type of ClOrdID[11] is a character string, and its value is a unique identifier (branch, sequence number and session date). Reports contain an OrderID[37] field that is assigned by the order processor and refers to the order that starts an order chain. The order originator and/or entering entity must use a unique ClOrdID for subsequent orders, cancels, and cancel replace requests. The messages are chained together since each message refers to the previous message by including its ClOrdID in the field OrigClOrdID[41]. **CCG does not guarantee uniqueness of ClOrdID.**

FIX Message Identifiers with NYSE Extensions

Tag	Field Name	Description
11	ClOrdID	Unique identifier for an Order as assigned by the order originator. Uniqueness must be guaranteed by mnemonic within a single trading day (across multiple lines of a firm), the session date is required as part of the field.  The ClOrdID must be unique within a single trading day for a given firm mnemonic. CCG does NOT validate the uniqueness of ClOrdID, it will simply forward the order to the downstream systems.
37	OrderID	Represents the originating/initial order in an order chain.
41	OrigClOrdID	ClOrdID of the previous order (NOT the initial order in a cancel replace chain) as assigned by the order originator, used to identify the previous order in cancel and cancel/replace requests.  In some cases, as in the Cancel Replace, the OrigClOrdID value differs from FIX 4.2

FIX generates a chain of messages, each of which bears a message identifier that can be traced back to the original/initial order (i.e. OrderID[37]). The order processor assigns an identifier (OrderID[37]) to the order itself.

7 Session Protocol

This section discusses FIX Session Protocol, which is responsible for providing reliable, ordered transport of FIX Application messages.

All messages sent by your firm must have one SenderCompID that is agreed upon in advance with NYSE and a TargetCompID of “CCG”

Only the following FIX Session MsgTypes may be sent to the NYSE CCG FIX:

Type	Message Name	Message Purpose
0	Heartbeat	Sent to monitor the communication link in intervals of 30 or 60 seconds as set in the initial logon message.
1	Test Request	When data has not been received for [<i>HeartBtInt</i> + <i>transmission time</i>] seconds. A test request forces a heartbeat from the opposing application.
2	Resend Request	Sent by the receiving application to initiate the retransmission of a message.
3	Reject	Response to messages that cannot be passed through to the application level due to “serious errors.”
4	Sequence Reset (Gap Fill)	Used by the sending application to reset incoming sequence number on the opposing side. Also used in lieu of messages not present during a <i>Sequence Reset</i> retransmission
5	Logout	Initiates or confirms the termination of a FIX session.
A	Logon	Sent by an application requesting to initiate a FIX session.

7.1 Logon

The Logon message is used to establish a FIX connection to NYSE trading systems. Session establishment can occur around 7:30am EST, once the CCG lines are up.

Establishing a FIX connection to an application through NYSE involves three distinct operations: creation of a telecommunications level link, authentication/acceptance of the initiator by the acceptor, and message sequence synchronization. The sequence of operations is as follows:

- The session initiator establishes a telecommunication link with the session acceptor using the NYSE mechanism for identifying the application. The session level message protocol is FIX and the transmission protocol is TCP/IP. **CCG supports FIX 4.2 only.**
- The initiator sends a *Logon* message. NYSE authenticates the FIX session by intercepting the FIX Logon message and checking the SenderCompID. If the ID matches the ID derived from the source IP address, NYSE transmits the message to CCG. If the initiator is authenticated, the acceptor responds with a *Logon* message. CCG sends a test request after a logon is accepted. If authentication fails, the session accepts or shuts down the connection and logs the attempt.

After authentication, the initiator and acceptor synchronize their messages through interrogation of the *MsgSeqNum* field before sending any queued or new messages. Message sequences are maintained for each FIX session, identified by the SenderCompID [49]. A comparison of the *MsgSeqNum* in the *Logon* message to the internally monitored next expected sequence number would indicate any message gaps. Likewise, the initiator can detect gaps by comparing the acknowledgment *Logon* message *MsgSeqNum* to the next expected value.

The Logon message format is as follows:

Tag	Field Name	Req'd	Comments
	<i>Standard Header</i>	Y	MsgType[35] = A
98	EncryptMethod	Y	Must be 0 (Always unencrypted)
108	HeartBtInt	Y	The Heartbeat interval in seconds.

Tag	Field Name		Req'd	Comments
95	RawDataLength		C	The number of bytes in a raw data field. May contain the value of "1" or "2" depending upon subscription settings in Tag 96.
96	RawData		C	Unformatted raw data Valid Values: Position 1 – Subscription to Cancel on Disconnect 0 = Not Subscribed 1 = Activate Cancel on Disconnect for orders sent to UTP only 2 = Activate Cancel on Disconnect for orders sent to Broker UTP only 3 = Activate Cancel on Disconnect for orders sent to both UTP and Broker UTP Position 2 – Subscription to Unsolicited Acknowledgements 0 = Not Subscribed 1 = Activate Unsolicited Order Acknowledgments Example 1 : Tag 96 = 11 (Activate both Cancel on Disconnect for orders sent to UTP, and Unsolicited Order Acknowledgements) Example 2: Tag 96 = 01 (Not subscribed to Cancel on Disconnect but Activated for Unsolicited Order Acknowledgements).
141	ResetSeqNumFlag		N	Indicates both sides of a FIX session should reset the sequence numbers.
383	MaxMessageSize		N	Can be used to specify the maximum number of bytes supported for messages received.
384	NoMsgTypes		N	Specifies the number of repeating MsgTypes.
→	35	MsgType	N	Specifies a specific, supported MsgType. Required if NoMsgTypes is > 0.
→	385	MsgDirection	N	Indicates direction (send vs. receive) of a supported MsgType. Required if NoMsgTypes is > 0
	Standard Trailer		Y	

7.2 Logout

Normal termination of the message exchange session is completed via the exchange of *Logout* messages. Before sending the Logout message, a Test Request message should be issued to force a Heartbeat from the other side. The Logout initiator waits for the opposite side to respond with a confirming Logout message. The FIX session is terminated upon receipt of the logout response from the user.

The Logout message format is as follows:

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType[35] = 5
58	Text	N	Text is limited to 25 characters.
	Standard Trailer	Y	

7.3 Heartbeat and Test Request

The heartbeat monitors the status of the communication link.

If the Heartbeat message is in response to a Test Request message, the field TestReqId[112] must be included in order for the recipient to be aware the message is in response to a Test Request and not a timeout. A TestReq is sent if the session heartbeat interval expires.

The Heartbeat message format is as follows:

Tag	Field Name	Req'd	Comments
	<i>Standard Header</i>	Y	MsgType[35] = 0
112	TestReqId	N	Required when the heartbeat is the result of a Test Request message.
	<i>Standard Trailer</i>	Y	

The Test Request message checks sequence numbers or verifies the communication line status (i.e. up/down). The opposite application responds to the Test Request message with a Heartbeat message containing the TestReqID[112].

Use of the field TestReqID[112] verifies that the opposite application is generating the heartbeat as the result of the Test Request message and not a timeout.

The Test Request message format is as follows:

Tag	Field Name	Req'd	Comments
	<i>Standard Header</i>	Y	MsgType[35] = 1
112	TestReqID	Y	Identifier included in Test Request message when the receiving application has not generated a heartbeat in 'n' seconds.
	<i>Standard Trailer</i>	Y	

7.4 Resend Request

A Resend Request message is generated by the receiving application, when a sequence number gap is detected. This message can be used to request the resending of a single message, a range of messages or all messages after a specified message.

If the sender chooses to not resend a specific message (i.e. an order because of movement or changes in the market), the sender can use a Sequence Reset Gapfill message. This message allows the sender to skip messages that the sender does not wish to resend.

The following are examples of resend requests:

- To request a single message: BeginSeqNo[7] = EndSeqNo[16].
- To request a range of messages, BegSeqNo[7] = first message of the range, EndSeqNo[16] = last message of the range.
- To request all messages after a specific message: BeginSeqNo[7] = first message of the range, EndSeqNo[16] = 0 (represents infinity).

Tag	Field Name	Req'd	Comments
	<i>Standard Header</i>	Y	MsgType[35] = 2
7	BeginSeqNo	Y	The message sequence number of the first message in the range of messages to be re-sent.
16	EndSeqNo	Y	The message sequence number of the last message in the range of messages to be re-sent. If the request is for a single message then BeginSeqNo[7] = EndSeqNo[16]. If the request is for all the messages subsequent to a particular message, EndSeqNo[16] = "0" (representing infinity).
	<i>Standard Trailer</i>	Y	

CCG always sends a resend request to request all messages subsequent to a particular message: BeginSeqNo = first message of range, EndSeqNo = 0 (represents infinity); but if firms do the following, CCG honors it:

To request a single message: BeginSeqNo = EndSeqNo

To request a range of messages: BeginSeqNo = first message of range, EndSeqNo = last message of range.

7.5 Sequence Reset

The Sequence Reset (Gap Fill) message is used to reset the next expected incoming sequence number. The Sequence Reset message can be used in the following situations:

- During normal resend processing – the firm may choose not to send a message (e.g. a stale order).
- During normal resend processing – the firm does not resend a number of administrative messages the Sequence Reset message is used to fill the sequence gap created.
- In the event of an application failure, it may be necessary to force the synchronization of sequence numbers on both sides.
- When a gap is detected in the inbound stream, a ResendReq message is sent requesting gapfill to infinity. Other than SeqReset- Reset, out of sequence messages are discarded. ResendReq should not be repeated on each incoming out of sequence message.

The Sequence Reset message always signifies that the application should be reset to the new sequence number to be transmitted.

The Sequence Reset message format is as follows:

Tag	Field Name	Req'd	Comments
	<i>Standard Header</i>	Y	MsgType[35] = 4
123	GapFillFlag	N	Indicates that the Sequence Reset message is replacing administrative or application messages, which are not present. Valid Values: Y = Gap Fill message, MsgSeqNum field valid. N = Sequence Reset, ignore MsgSeqNum.
36	NewSeqNo	Y	The new valid sequence number.
	<i>Standard Trailer</i>	Y	

7.6 Reject

The Reject message is generated upon receipt of an invalid message and is displayed in the Text[58] field.

The reject message should be issued when a message is received but cannot be properly processed due to a session-level rule violation. An example of when a reject may be appropriate would be the receipt of a message with invalid basic data (e.g. MsgType=&), which successfully passes CheckSum and BodyLength checks. As a rule, messages should be forwarded to the trading application for business level rejections whenever possible. In addition to the basic data validation referenced above, the FIX Engine rejects incoming messages and provides a meaningful text message if:

1. There is a tag sequence error (message has passed basic validation but intermixed header/body tags).
2. Required tags are missing.
3. Inappropriate version tags are present.
4. There is a SenderCompID mismatch.

The Reject message format is as follows:

Tag	Field Name	Req'd	Comments
	<i>Standard Header</i>	Y	MsgType[35] = 3
45	RefSeqNum	Y	The reference sequence number of the rejected message.

Tag	Field Name	Req'd	Comments
373	SessionRejectReason	N	A code, which identifies the reason for the session level reject. Valid values: 0 = Invalid Tag Number 1 = Required Tag Missing 2 = Tag not defined for this message type 3 = Undefined Tag 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag 6 = Incorrect data format for value 7 = Decryption problem 8 = Signature problem 9 = CompID problem (SenderCompID, TargetCompID, or both) 10 = SendingTime accuracy problem 11 = Invalid MsgType
371	RefTagId	N	The tag number of the FIX field being referenced.
372	RefMsgType	N	The MsgType of the FIX message being referenced.
58	Text	N	Reject text, which identifies the reason for the rejected message. Text is limited to 25 characters.
	<i>Standard Trailer</i>	Y	

7.7 Sequencing and Reconnecting

When the incoming sequence number does not match the next expected number, corrective processing is required. The FIX specification assumes that if the incoming message has a sequence number lower than expected and the PossDupFlag is not set, there has been a serious error. The specification strongly recommends that the session be terminated and manual intervention be initiated. If the incoming sequence number is greater than expected, it indicates that messages were missed and retransmission of the messages is requested via the *Resend Request*. If the incoming sequence number is lower than expected and the PossDupFlag is not set, the FIX Engine sends Logout message with text referring to the error and terminate the session. A Logout message can also be initiated from the FIX engine for the following reasons:

1. Receipt of bad data.
2. Incoming Seq Num Less Than Expected Sequence number and it is Not a poss dup message/Seq Reset message.
3. SenderCompID Problem.
4. TargetCompID Problem.
5. Sending Time accuracy problem: Poss Dup flag is set and OrigSendingTime is later than Sending Time.
6. Sending Time accuracy problem: Sending time value is either not specified in GMT OR is not within 2 minutes of atomic clock.
7. Invalid Logon Message received.

Upon receipt of a *Resend Request*, the responder can respond in one of three ways:

1. Retransmit the requested messages (in order) with the original sequence numbers and *PossDupFlag* set to "Y".
2. Issue a *SeqReset – GapFill with PossDupFlag set to "Y"* message to replace the retransmission of administrative and application messages.
3. Issue a *SeqReset-Reset with PossDupFlag set to "Y"* to force sequence number synchronization.

During the gap fill process, administrative messages, other than Reject, should not be retransmitted. A special *SeqReset – GapFill* message is generated for *Logon*, *Logout*, *ResendRequest*, *Heartbeat*, *TestRequest* and *SeqReset-Reset* and *SeqReset-GapFill*. The

SeqReset-GapFill message can also be used to skip application messages that the sender chooses not to retransmit (e.g. aged orders).

If an inadvertently retransmitted administrative message (*PossDupFlag* flag set indicating a resend) is received, it is processed for sequence number integrity only; any other processing of this message is skipped.

CCG Responses to Sequence Number Errors by Message Type

Message Type	Action to Be Taken on Sequence # Mismatch
Logon	Must always be the first message transmitted. Authenticate and accept the connection. After sending a <i>Logon</i> confirmation back, send a <i>ResendRequest</i> if a message gap was detected in the <i>Logon</i> sequence number.
Logout	If a message gap was detected, issue a <i>ResendRequest</i> to retrieve all missing messages followed by a <i>Logout</i> message, which serves as a confirmation of the logout request. Do not terminate the session. The initiator of the <i>Logout</i> sequence has responsibility to terminate the session. This allows the <i>Logout</i> initiator to respond to any <i>ResendRequest</i> message. If the user side was the initiator of the <i>Logout</i> sequence, then this is a <i>Logout</i> confirmation and the session should be immediately terminated upon receipt. The session acceptor can terminate the session immediately when the initiator sends an invalid <i>Logon</i> message. This reduces the threat of unauthorized connection attempts.
ResendRequest	Perform the Resend processing first, followed by a <i>ResendRequest</i> of your own in order to fill the incoming message gap.
SeqReset-Reset	Ignore the incoming sequence number. The <i>NewSeqNo</i> field of the <i>SeqReset</i> message contains the sequence number of the next message to be transmitted.
SeqReset-GapFill	Send a <i>ResendRequest</i> back. Gap Fill messages behave similar to a <i>SeqReset</i> message. However, it is important to insure that no messages have been inadvertently skipped over. This means that <i>GapFill</i> messages must be received in sequence. An out of sequence <i>GapFill</i> is an abnormal condition
All Other Messages	Perform Gap Fill operations.

7.8 Message Delivery

The FIX protocol specifies the message delivery behavior. Two fields help with resending messages. The *PossDupFlag* is set to Y when resending a message as the result of a session level event (i.e. the retransmission of a message reusing a sequence number). The *PossResend* is set to Y when the application reissues a message with a new sequence number (e.g. resending an order). The receiving application should process these messages as follows:

- *PossDupFlag* – if a message with this sequence number has been previously received, ignore message, if not, process normally.
- *PossResend* – forward message to application and determine if previously received (i.e. verify order id and parameters).

Sequence Numbers

At the start of day, sequence numbers are initialized at the start of a FIX session starting at 1. The user can generate a *Sequence Reset* message to reset the next expected incoming sequence number for use in session re-initialization. NYSE systems only accept a sequence reset to sequence number 0001 (for CCG there are no leading zeros) for use in session re-initialization. Sequence numbers cannot be made up of all zeros.

Heartbeats

During periods of message inactivity, according to the FIX protocol, FIX applications generate *Heartbeat* messages at regular time intervals. Both parties, using the *HeartBtInt* field in the *Logon* message, declare the heartbeat interval.

Ordered Message Processing

The FIX protocol assumes ordered delivery of messages between parties. When a message with a higher than expected sequence number arrives, the protocol engine requests the message originator to fill the gap, and stops transmitting messages to the application until it does so. Supported method is, for example, if the receiver misses the second of five messages, the application

could ignore messages 3 through 5 and generate a resend request for messages 2 through 5, or, preferably 2 through 0 (where 0 represents infinity).

Possible Duplicates

A possible duplicate message is generated in response to a resend request made by a FIX Engine.

In the FIX protocol, the message is a retransmission with the same sequence number of the application data with the PossDupFlag [43] included and set to |Y| in the header.

Possible Resends

The FIX protocol supports the resending of messages with the PossResend flag [97] set with a new FIX sequence number. This is useful when an order remains unacknowledged for an inordinate length of time and the end-user suspects it had never been sent.

Required Fields

Each message within the protocol is comprised of required, optional and conditionally required fields (fields which are required based on the presence or value of other fields). Systems should be designed to operate when only the required and conditionally required fields are present. NYSE's FIX Engine's interpretation is that the required and conditionally required fields must be present otherwise messages are rejected.

Message Header

Each Application and Administrative message is preceded by the FIX standard message header. The FIX message header identifies the message type, length, destination, sequence number, origination point and time.

Tag	Field Name	Req'd	Field Description
8	BeginString	Y	FIX.4.2 <i>(Always unencrypted)</i>
9	BodyLength	Y	<i>(Always unencrypted, must be second field in message)</i>
34	MsgSeqNum	Y	<i>(Can be embedded within encrypted data section.)</i> part of the FIX Session Protocol.
35	MsgType	Y	<i>(Always unencrypted, must be third field in message)</i>
43	PossDupFlag	C	Always required for retransmitted messages, whether prompted by the sending system or as the result of a resend request. Handled locally by the FIX Engine.
49	SenderCompID	Y	<i>(Always unencrypted)</i> Identifies the session. SenderCompID[49] is defined as an alphanumeric (max 12) on input. Assigned by NYSE Technology Member Services and Connectivity Groups (i.e. ABC_DEFG01). On output is defined as "CCG".
50	SenderSubID	N	<i>The FIX specification allows this field to be within the encrypted data section.</i> Maximum length = 10.
52	SendingTime	Y	YYYYMMDD-HH:MM:SS (Always in GMT time)
56	TargetCompID	Y	On input to CCG identifies the target application, e.g. CCG. <i>(Always unencrypted)</i> On output from CCG is defined as an alphanumeric representing the device name (i.e. ABC_DEFG01).
57	TargetSubID	C	CCG uses this string for valid NYSE routing codes. Values accepted by the NYSE include 4 (Broker Systems), and 7 (AutoExecute). May be blank for orders routed to the Trading Engine. When populated, Tag 9487 (Routing Instruction) cannot also be populated. Value of "4" is required for all orders, cancels, cancel replaces and cancel reduces routed to Broker Systems. Returned from Broker Systems on Order Reject messages only.
97	PossResend	C	Required when message may be a duplicate of another message sent under a different sequence number.
115	OnBehalfOfCompID	Y	Firm Mnemonic assigned by NYSE.

Tag	Field Name	Req'd	Field Description
116	OnBehalfOfSubID	N	Trading partner SubID used when delivering messages via a third party.
122	OrigSendingTime	C	Required for message resends. If data is not available set to same value as SendingTime.
128	DeliverToCompID	N	Outbound messages will contain the Firm Mnemonic.
129	DeliverToSubID	N	Trading partner SubID used when delivering messages via a third party.
142	SenderLocationID	N	Contains the value in tag 143 from the original order.
143	TargetLocationID	C	Trading partner LocationID (i.e. broker booth information, or a broker's badge number for e-Broker handheld routing). Required for all orders, cancels, cancel replaces and cancel reduces routed to Broker UTP.
144	OnBehalfOfLocationID	N	Trading partner LocationID (i.e. geographic location and/or desk) used when delivering messages via a third party.
145	DeliverToLocationID	N	Trading partner LocationID (i.e. geographic location and/or desk) used when delivering messages via a third party.

The inbound value of SenderCompID[49] is switched with the inbound value of TargetCompID[56] to generate the outbound message header from CCG. The same logic holds for the inbound value of OnBehalfOfCompID[115] and if present the inbound value of DeliverToCompID[128] to generate the outbound message header from CCG.

Message Trailer

The standard FIX message trailer terminates all Application and Administrative FIX messages. The trailer is used to segregate messages and contains the three digit character representation of the Checksum[10] value.

Tag	Field Name	Req'd	Comments
93	SignatureLength	N	Required when trailer contains signature. Note: Not to be included within SecureData field
89	Signature	N	Note: Not to be included within SecureData field
10	Checksum	Y	(Always unencrypted, always last field in message)

8 FIX Application Protocol

This section describes some of the FIX Application messages. It is not a complete reference and should be used in conjunction with the FIX protocol specification. Order, Cancel, Cancel Reduce and Cancel Replace acknowledgements will be returned with all tags submitted on the original request.

Only the following FIX Application MsgTypes may be sent to or received from NYSE CCG FIX:

Type	Message Name	Message Purpose
D	Order – Single	Used for submission of a new <i>Order</i> for execution.
F	Order Cancel Request	Requests the cancellation of the remaining quantity of an existing <i>Order</i> or the reduction in quantity of an existing <i>Order</i> .
G	Order Cancel/Replace Request	Used to change the parameters of an existing <i>Order</i> . Treated as a new order with a unique sequence number. Cancel Replace can also be used for “Makes” messages.
8	Execution Report	Confirm Receipt of an <i>Order</i> Changes to an existing <i>Order</i> Relay <i>Order</i> status information Fill information on working <i>Orders</i> Reject <i>Orders</i>
9	Order Cancel Reject	Issued upon receipt of a <i>Cancel Request</i> or <i>Cancel/Replace Request</i> that does not meet requirements.

8.1 New Order – Single

In addition to requirements for the standard FIX message header, the following fields are used by the application layer for a NYSE CCG New Order – Single message.

Tag	Field	Description	Req.	Values
	Standard Header		Y	MsgType = D
1	Account	This field can be used for miscellaneous information.	N	Up to 32 alphanumeric characters. **For symbols migrated to Pillar - up to 20 alphanumeric characters. Control characters not allowed. Note: If max length is exceeded value will be truncated.
11	ClOrdID	Identifier of the order as assigned by order originator. This field is used for access to the FIX Order File. Each user is required to guarantee that the same Branch Code and Sequence number combination is not used by the SAME mnemonic more than once in a single processing day.	Y	Format: BBB^NNNN/MMDDYYYY . Branch code is 2 to 3 alpha characters followed by a 1 space delimiter and a sequence number up to 4 digits which does not need to be zero prefixed. However, if sequence is populated with less than 4 digits, all subsequent msgs returned will be prefixed to return a 4 digit value in the sequence portion. The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY). Any deviation from this format will result in the message rejected by CCG.

Tag	Field	Description	Req.	Values
				<p>HMQ, YYY, RRR, ZZZ, TTT, QQQ, ZYY, ZYZ or ZYX should not be used; NYSE rejects transmission with these branch codes since they are reserved.</p> <p>No leading or trailing blanks or special characters are allowed.</p>
18	ExecInst	Instructions for order handling on exchange trading floor.	N	<p>M = Mid-Price Peg (MPL) indicator y = Trade-at ISO</p> <p>Note: Tag 18 is not supported for orders routed to Broker Systems.</p>
38	OrderQty	Indicates share quantity on order	Y	<p>Number of shares trading: 1 – 25,000,000 to Matching Engine.</p> <p>**For symbols migrated to Pillar:</p> <ul style="list-style-type: none"> 1 – 25,000,000 for Auction only order types (Opening Only/MOO, LOO; MOC, LOC, Closing Offset) 1 – 5,000,000 for all other order types <p>1 – 99,000,000 for all Broker Systems</p>
40	OrdType	Indicates order type	Y	<p>1 = Market 2 = Limit 5 = Market on close B = Limit On Close</p>
44	Price	Indicates price on order in decimals.	C	<p>.0001 – 999,999.99</p> <p>Not required for Market orders</p> <p>Prices with values exceeding 10 characters inclusive of the decimal point will be rejected.</p> <p>Note: Subpenny price only accepted under \$1.00.</p> <p>Note: For RPI orders, limit prices will be accepted in sub-pennies above and below \$1.00, but must be in multiples of the minimum offset price (currently defined as \$0.0010).</p> <p>**For symbols migrated to Pillar – maximum order price determined by XDP Price Scale for the symbol:</p> <ul style="list-style-type: none"> - Max price for securities with a price scale of 6 is \$4,294.672960 - Max price for securities with a price scale of 4 is \$429,467.2960 - Max price for securities with a price scale of 3 is \$999,999.99
47	OrderCapacity	<p>Represents the Account Type, which reflects the type of trade as well as the relationship between the beneficial owner of the account and the member organization clearing the trade.</p> <p>Note: This Tag is required unless Tag 9460 is present.</p>	Y	Reference Appendix B for valid values and definitions

Tag	Field	Description	Req.	Values
54	Side	Side of the Order	Y	1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt
55	Symbol	This field must contain a valid symbol in upper case lettering.	Y	Ticker symbol.
58	Text	Free Format Text String	N	Up to 25 Characters. Control characters not allowed. Note: This field will not be returned with the same value on execution reports.
59	TimeInForce	If a value is not present in this field, the default is Day.	Y	0 = Day 2 = OPG (At the Opening) 3 = IOC (Immediate Or Cancel)
60	TransactTime	GMT Transaction Time	N	YYYYMMDD-HH:MM:SS
63	SettlmntTyp	Indicates order settlement period. Absence of this field is interpreted as Regular.	N	0 = Regular 1 = Cash 2 = Next Day 8 = Seller's Option Note: Values 1, 2 and 8 are only valid on orders routed to Broker UTP. If 63=8, tag 287 must also be present.
65	Symbolsfx	This field must contain a valid symbol suffix in upper case lettering.	N	Valid Suffix value
97	PossResend	Indicates the message may contain information that was sent under another sequence number.	N	Y = Possible Resend N = Original Transmission
109	ClientID	4 byte alphanumeric MPID value	C	Contains the Sending firm's Market Participant ID (MPID). Control characters not allowed. Required when routing new and cancel/replace messages to Broker Systems. Returned on acknowledgements, replaces, executions, and order drop copy messages. Required when designating an order with Self Trade Prevention (Tag 7928) to the Trading Engine. Returned on all order activities.
110	MinQty	Minimum number of shares to be traded in order for an execution to occur.	C	A Minimum Trade Size Quantity for orders with a Time in Force of "IOC" Value may be Zero. **For symbols migrated to Pillar - see section "NYSE Equities Order Types" for list of order types that support this attribute
111	MaxFloor	Maximum number of shares within an order to be shown on the exchange floor at any given time.	N	The minimum value for this tag is zero. If specifying a quantity other than zero, the value must be equal to the quantity of the order, or in multiples of the round lot parameter associated with the stock symbol (formerly known as the UOT).

Tag	Field	Description	Req.	Values
				<p>NOTE: This tag is not valid for orders routed to Broker UTP</p> <p>**For symbols migrated to Pillar - Reserve order may only be entered with MaxFloor = a multiple of the symbol's round lot parameter. Mixed lots are rejected</p>
207	SecurityExchange	<p>Market used to help identify a security.</p> <p>Note: Even though this tag is required, it is currently not used in routing decisions. Routing is based on symbol and the exchange that is listed as the primary marketplace.</p>	Y	N = NYSE
287	SellerDays	Indicates number of days for Seller's Option settlement type.	C	<p>Specifies the number of days that may elapse before delivery of the security. This tag is required if tag 63=8.</p> <p>Valid values are 2 thru 60.</p>
377	SolicitedFlag	Indicates whether the order was solicited.	N	<p>Y = Was solicited</p> <p>N = Was not solicited</p>
439	ClearingFirm	Names the clearing member designated by another clearing or non-clearing member for settlement of its Exchange transactions.	N	Clearing Firm Value
7928	SelfTradeType	Used to prevent the order from trading against another order with the same ClientId (MPID).	N	<p>"N" – Cancel Newest (or arriving order)</p> <p>"O" – Cancel Oldest (or resting order)</p> <p>Returned on all orders and order activities.</p> <p>Available to all Order types. Note: Opening (OPG) orders, Market on Close (MOC) and Limit on Close (LOC) orders will not be validated for Self-Trade Prevention.</p>
9403	OffsetPrice	Offset or minimum price improvement value from the current Bid or Offer.	C	<p>This tag is required if 9487=RPI</p> <p>Value must be zero, greater than or equal to the minimum offset value (\$0.0010) and must be in multiples of \$0.0010.</p>
9432	MiscDataLine4	Miscellaneous Text Field	N	1-27 Character Text Field
9460	OrderCapacity2	<p>Additional value representing accounting type.</p> <p>Note: If using Tag 9460, Tag 47 cannot also be present. Tag 9460 cannot be used if Tag 47 is present</p>	N	<p>Q - Indicates that an error was made in the execution of a previous order (for example, wrong stock or wrong side of the market, etc.) or on missing the market on a held order.</p> <p>Tag 47 will also accept a value of Q.</p>
9487	RoutingInstruction	Routing Instructions	N	<p>ISO = Inter-Market Sweep</p> <p>DNS = Do Not Ship</p>

Tag	Field	Description	Req.	Values
		Note: See NYSE Equities Order Types Section for definitions.		SOC = NMS IOC CO = Closing Offset Order **For symbols migrated to Pillar – available for Tape A securities only RPI = Retail Price Improvement Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update RTO = Retail Only Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update as Limit only; Market not supported RTNR = Retail Non-Routable Order **For symbols migrated to Pillar – not supported RTR = Retail Routable Order **For symbols migrated to Pillar – not supported ALO = Add Liquidity Only ISO ALO – Add Liquidity Only Intermarket Sweep Order Note: When using Tag 9487, Tag 57 cannot also be present
9568	MinimumTriggerVol (MTV)	Minimum Trigger Volume for Midpoint Passive Liquidity (MPL) order	N	Must be equal to or less than the Order Quantity or Zero. Cannot be present if MPL order is also designated as STP. **For symbols migrated to Pillar - see section “NYSE Equities Order Types” for list of order types that support this attribute
	Standard Trailer		Y	

8.2 Cancel Reduce & Cancel Replace Information

**For symbols migrated to Pillar – Cancel to Reduce via Message Type F not supported; instead use Cancel/Replace to reduce quantity and maintain ranking on the book

The following section outlines the order chain logic in Cancel Requests (Message Type F) and Cancel/Replace (Message Type G) messages.

Cancel to Reduce Message (35=F) Information

A Cancel Request (Message Type F) can also be used to reduce the quantity of an order (also known as a partial cancel). When reducing the quantity of an order, the OrderQty[38], NewOrdQty[9429] and CxlQty[9428] fields must be present. The original ClOrdID (i.e. OrigClOrdId[41]) is referenced and OrderID[37] (the start of the Order chain) must be present, allowing the user to keep their position on the DMM's book.

The Table Below illustrates the use of OrderID[37] in multiple Cancel to Reduce (Leaves) Message Type F messages. Note that in the example below OrderID[37] always refers to the start of the Order Chain.

Use of OrderID[37] in Multiple Cancel Request Messages - Type F

	Message Sequence	Msg.Type	ClOrdID[11]	OrigClOrdId[41]	OrderID[37]
1	Order	D	JWB 0001/03102009		
2	Cancel to Reduce	F	JWB 0002/03102009	JWB 0001/03102009	JWB 0001/03102009
3	Cancel to Reduce	F	JWB 0003/03102009	JWB 0001/03102009	JWB 0001/03102009
4	Cancel to Reduce	F	JWB 0004/03102009	JWB 0001/03102009	JWB 0001/03102009



Note:

If there are multiple Cancel to Reduce (Leaves) messages for a specific Order, the OrderID[37] must reference the original/initial order in the chain and must be consistent throughout. The OrderQty[38] field is the original/initial order quantity, UTP calculates the fills against the reduction.

Cancel Replace (MsgType = G) Order Chain

The table below illustrates the use of OrderID[37] in multiple Cancel Replace Message Type G messages. Note that in the examples below OrderID[37] references the start of the “new” Order chain and is populated with the OrigClOrdId[41] tag value.

Use of OrderID[37] in Multiple Cancel Replace Messages - Type G

	Message Sequence	Msg.Type	ClOrdID[11]	OrigClOrdId[41]	OrderID[37]
1	Order	D	JWB 0001/03102009		
2	Cancel Replace	G	JWB 0002/03102009	JWB 0001/03102009	JWB 0001/03102009
3	Cancel Replace	G	JWB 0003/03102009	JWB 0002/03102009	JWB 0002/03102009
4	Cancel Replace	G	JWB 0004/03102009	JWB 0003/03102009	JWB 0003/03102009

Cancel Replace (MsgType = G) followed by Cancel Reduce Messages and subsequent Cancel Replaces

The table below illustrates the use of OrderID[37] in multiple Cancel Replace Message Type G messages followed by multiple Cancel to Reduce Message Type F. Note in the examples below the value of OrderID[37] changes as the message type changes from Message Type G to Message Type F.

Use of OrderID[37] in a Cancel Replace Message (Type G) Followed by Cancel to Reduce Message (Type F)

	Message Sequence	Msg.Type	ClOrdId[11]	OrigClOrdId[41]	OrderID[37]
1	Order	D	JWB 0001/03102009		
2	Cancel Replace	G	JWB 0002/03102009	JWB 0001/03102009	JWB 0001/03102009
3	Cancel Replace	G	JWB 0003/03102009	JWB 0002/03102009	JWB 0002/03102009
4	Cancel to Reduce	F	JWB 0004/03102009	JWB 0003/03102009	JWB 0003/03102009
5	Cancel to Reduce	F	JWB 0005/03102009	JWB 0003/03102009	JWB 0003/03102009
6	Cancel Replace	G	JWB 0006/03102009	JWB 0003/03102009	JWB 0003/03102009
7	Cancel Replace	G	JWB 0007/03102009	JWB 0006/03102009	JWB 0006/03102009

Please note – If a cancel replace request is received at the same time the original order is being executed, it is possible to receive a “Replaced” message (tags 39 and 150 = 5) with a zero leaves quantity (tag 151=0).

8.3 Order Cancel Request

In addition to requirements for the standard FIX message header, the following fields are used by the application layer for a NYSE Order Cancel Request.

Tag	Field	Description	Req.	Values
	Standard Header		Y	MsgType = F
1	Account	This field can be used for miscellaneous information.	N	32 character account information field. **For symbols migrated to Pillar - up to 20 alphanumeric characters. Control characters not allowed. Note: If max length is exceeded value will be truncated.
11	ClOrdID	Unique ID of cancel request.	Y	CCG does not validate ClOrdID for uniqueness. The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY). Any deviation from this format will result in the message being rejected by CCG.
37	OrderID	For Individual Order Cancellation: Original/initial order information (start of the order chain) For Bulk Cancel/Block or Unblock: Instruction on handling of Bulk Action message.	Y	Individual Order Cancel: Populate with original/initial order information (start of the order chain). The format should be BBB^NNNN/MMDDYYYY. The sequence number must be padded with leading zeros, ex. 0001. On multiple Cancel to Reduce (Leaves) messages referencing a single Order, OrderID must refer to the original/initial Order in the chain. Note: If a Cancel to Reduce (Message Type F) is generated and the previous message uses a Cancel

Tag	Field	Description	Req.	Values
				<p>Replace (Message Type G), fill with the OrigClOrdId[41] of the Cancel Replace message. On all subsequent Cancel to Reduce messages refer to the “new” initial Order in the order chain.</p> <p>The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY). Any deviation from this format will result in the message rejected by CCG.</p> <p>Bulk Cancel / Block / Unblock:</p> <p>OrderID field (tag 37) should be populated with the pre-assigned codes for the actions desired by the customer. Please refer to Appendix C for the detailed list of codes and corresponding action and scope.</p>
38	OrderQty		Y	<p>Original/Initial Order quantity 1 – 25,000,000 to Matching Engine.</p> <p>**For symbols migrated to Pillar:</p> <ul style="list-style-type: none"> 1 – 25,000,000 for Auction only order types (Opening Only/MOO, LOO; MOC, LOC, Closing Offset) 1 – 5,000,000 for all other order types <p>1 – 99,000,000 for all Broker Systems</p>
41	OrigClOrdID	ClOrdID of the previous order in the chain to be cancelled.	C	<p>Required when used to cancel an individual order and must match original order on file.</p> <p>The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY). Any deviation from this format will result in the message being rejected by CCG.</p> <p>Can be blank for Bulk Cancel request. If populated on a Bulk Cancel request value will be ignored.</p>
54	Side	Side of order	C	<p>Required when used to cancel an individual order and must match original order on file.</p> <p>Can be blank for Bulk Cancel request. If populated on a Bulk Cancel request value will be ignored.</p>
55	Symbol	Valid ticker symbol as defined by NYSE	C	<p>Required when used to cancel an individual order and must match original order on file.</p> <p>Can be blank for Bulk Cancel request. If populated on a Bulk Cancel request value will be ignored.</p>
58	Text	Free format text String	N	<p>The length of this field is limited to 25 characters. Not required to repeat in a Cancel message. Control characters not allowed.</p>
65	SymbolSfx	Valid Symbol Suffix	C	<p>Required when used to cancel an individual order and must match original order on file.</p> <p>Can be blank for Bulk Cancel request. If populated on a Bulk Cancel request value will be ignored.</p>
207	SecurityExchange	Market used to help identify a security.	Y	<p>N = NYSE</p>
9428	CxlQty	Desired quantity to be canceled	N	<p>Required when NewOrdQty [9429] is present.</p> <p>Used for Cancel Reduce Only</p>

Tag	Field	Description	Req.	Values
	**For symbols migrated to Pillar – not supported; instead use Cancel/Replace to reduce quantity and maintain ranking on the book			
9429	NewOrdQty	New order quantity (includes the open and executed amount).	N	Required when CxlQty [9428] is present. Used for Cancel Reduce Only
9442	SolicitedFlag **For symbols migrated to Pillar – not supported; instead use Cancel/Replace to reduce quantity and maintain ranking on the book	The Solicited Flag is not used in CCG.	N	Returned in subsequent messages
	Standard Trailer		Y	

NOTE: Header tags 57 and 143 are required for all cancels and cancel reduces of orders routed to Broker UTP. Tag 143 is required for all cancels and cancel reduces of orders routed to CBS.

8.4 Order Cancel/Replace Request

In addition to requirements for the standard FIX message header, the following fields are used by the application layer for a NYSE Order Cancel/Replace Request.

Tag	Field	Description	Req.	Values
	Standard Header		Y	MsgType = G
1	Account	This field can be used for miscellaneous information.	N	32 character account information field. **For symbols migrated to Pillar - up to 20 alphanumeric characters. Control characters not allowed. Note: If max length is exceeded value will be truncated.
11	ClOrdID	Unique ID of the Cancel Replace	Y	Format: BBB^NNNN/MMDDYYYY . Branch code is 2 to 3 alpha characters followed by a 1 space delimiter and a sequence number up to 4 digits which does not need to be zero prefixed. However, if sequence is populated with less than 4 digits, all subsequent msgs returned will be prefixed to return a 4 digit value in the sequence portion. CCG does not validate ClOrdID for uniqueness. The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY).
18	ExecInst	Instructions for order handling on exchange trading floor.	N	M = Mid-Price Peg (MPL) indicator y = Trade-at ISO Note: Tag 18 is not supported for orders routed to Broker Systems.
37	OrderID	Original/initial order information (start of the order chain)	Y	Populate with original/initial order information (start of the order chain). The format should be BBB^NNNN/MMDDYYYY. (Note: For CCG, the sequence number must be padded with leading zeros, ex. 0001.). The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY). Any deviation from this format will result in the message rejected by CCG.
38	OrderQty	This value can be changed	Y	Desired Quantity 1 – 25,000,000 to Matching Engine. **For symbols migrated to Pillar: <ul style="list-style-type: none"> 1 – 25,000,000 for Auction only order types (Opening Only/MOO, LOO; MOC, LOC, Closing Offset) 1 – 5,000,000 for all other order types 1 – 99,000,000 for all Broker Systems
40	OrdType	This value can be changed	Y	1=Market 2=Limit 5 = Market on close B = Limit On Close
41	OrigClOrdID	ClOrdID of the previous live order	Y	The value for this field must be in UPPERCASE (e.g.

Tag	Field	Description	Req.	Values
		in the chain.		BBB^NNNN/MMDDYYYY). Any deviation from this format will result in the message rejected by CCG.
44	Price	This value can be changed	C	.0001 – 999,999.99 Contains the new price of the replacement order. Not required for Market orders. Prices with values exceeding 10 characters inclusive of the decimal point will be rejected. Note: Sub penny price only accepted under \$1.00 Note: For RPI orders, limit prices will be accepted in sub-pennies above and below \$1.00, but must be in multiples of the minimum offset price (currently defined as \$0.0010). **For symbols migrated to Pillar – maximum order price determined by XDP Price Scale for the symbol: - Max price for securities with a price scale of 6 is \$4,294.672960 - Max price for securities with a price scale of 4 is \$429,467.2960 - Max price for securities with a price scale of 3 is \$999,999.99
47	OrderCapacity	Represents the Account Type, which reflects the type of trade as well as the relationship between the beneficial owner of the account and the member organization clearing the trade.	Y	See “New Order – Single” Message (Section 7.1) Reference Appendix B for valid values and definitions
54	Side	Side of order. This value cannot be changed and must be the value from the original order	Y	1 = Buy 2 = Sell 5 = Sell Short 6 = Sell Short Exempt
55	Symbol	Valid symbol as defined by NYSE	Y	This value cannot be changed and must be the value from the original order.
58	Text	Free Format Text String	N	Text is limited to 25 characters. Control characters not allowed.
59	TimeInForce	This value can be changed.	Y	0=Day 2=At the Opening 3=IOC
63	SettlemntTyp	Indicates order settlement period.	N	0 = Regular Way 1 = Cash 2 = Next Day 8 = Seller's Option Note: Values 1, 2 and 8 are only valid on orders routed to Broker UTP. If 63=8, tag 287 must also be present.
65	SymbolSfx	Valid Suffix Value	Y	This value must match the original order.

Tag	Field	Description	Req.	Values
109	ClientID	4 byte alphanumeric MPID value	C	<p>Contains the Sending firm's Market Participant ID (MPID). Control characters not allowed.</p> <p>Required when routing new and cancel/replace messages to Broker Systems. Returned on acknowledgements, replaces, executions, and order drop copy messages.</p> <p>Required when designating an order with Self Trade Prevention (Tag 7928) to the Trading Engine. Returned on order and cancel/replacement acknowledgements and order drop copies only.</p>
110	MinQty	Minimum number of shares to be traded in order for an execution to occur.	C	<p>A Minimum Trade Size Quantity for orders with a Time in Force of "IOC"</p> <p>Value may be Zero.</p> <p>**For symbols migrated to Pillar - see section "NYSE Equities Order Types" for list of order types that support this attribute</p>
111	MaxFloor	Maximum number of shares within an order to be shown on the exchange floor at any given time.	N	<p>The minimum value for this tag is zero. If specifying a quantity other than zero, the value must be equal to the quantity of the order, or in multiples of the round lot parameter associated with the stock symbol (formerly known as the UOT)</p> <p>NOTE: This tag is not valid for orders routed to Broker UTP</p> <p>**For symbols migrated to Pillar - Reserve order may only be entered with MaxFloor = a multiple of the symbol's round lot parameter. Mixed lots are rejected</p>
207	SecurityExchange	Market used to help identify a security.	Y	N = NYSE
287	SellerDays	Indicates number of days for Seller's Option settlement type.	C	<p>Specifies the number of days that may elapse before delivery of the security. This tag is required if tag 63=8.</p> <p>Valid Values are 2 thru 60.</p>
377	SolicitedFlag	Indicates whether or not the order was solicited	N	Indicates whether or not the order was solicited
439	Clearing Firm	Optional field: names the clearing member designated by another clearing or non-clearing member for settlement of its Exchange transactions.	N	Name of clearing member designated by another clearing or non-clearing member for settlement of its Exchange transactions.
7928	SelfTradeType	Used to prevent the order from trading against another order with the same ClientId (MPID).	N	<p>"N" – Cancel Newest (or arriving order) "O" – Cancel Oldest (or resting order)</p> <p>Available to all Order types. Note: Opening (OPG) orders, Market on Close (MOC) and Limit on Close (LOC) orders will not be validated for Self-Trade Prevention.</p>

Tag	Field	Description	Req.	Values
9403	OffsetPrice	Offset or minimum price improvement value from the current Bid or Offer.	C	This tag is required if 9487=RPI Value must be zero, greater than or equal to the minimum offset value (\$0.0010) and must be in multiples of \$0.0010.
9432	MiscDataLine4	Miscellaneous Text Field	N	1-27 Character Text Field
9460	OrderCapacity2	Additional value representing accounting type. Note: If using Tag 9460, Tag 47 cannot also be present. Tag 9460 cannot be used if Tag 47 is present	N	Q - Indicates that an error was made in the execution of a previous order (for example, wrong stock or wrong side of the market, etc.) or on missing the market on a held order. Tag 47 will also accept a value of Q.
9487	RoutingInstruction	Routing Instructions	N	ISO = Inter-Market Sweep DNS = Do Not Ship SOC = NMS IOC CO = Closing Offset Order **For symbols migrated to Pillar – available for Tape A securities only RPI = Retail Price Improvement Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update RTO = Retail Only Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update as Limit only; Market not supported RTNR = Retail Non-Routable Order **For symbols migrated to Pillar – not supported RTR = Retail Routable Order **For symbols migrated to Pillar – not supported ALO = Add Liquidity Only ISO ALO – Add Liquidity Only Intermarket Sweep Order Note: When using Tag 9487, Tag 57 cannot also be present
9568	MinimumTriggerVol (MTV)	Minimum Trigger Volume for Mid-Point Passive Liquidity (MPL) order	N	Must be equal to or less than the Order Quantity or Zero. Cannot be present if MPL order is also designated as STP. **For symbols migrated to Pillar - see section "NYSE Equities Order Types" for list of order types that support this attribute
	Standard Trailer		Y	

NOTE:

Header tags 57 and 143 are required for all cancel replaces of orders routed to Broker UTP. Tag 143 is required for cancel replaces of orders routed to CBS.

8.5 Order Cancel Reject

In addition to requirements for the standard FIX message header, the following fields are returned by the application layer on a NYSE CCG Order Cancel or Cancel/Replace Reject Message.

Tag	Field	Description	Req.	Values
	Standard Header		Y	MsgType = 9
11	ClOrdID	Unique identifier of the order	Y	Unique identifier of the order
30	LastMkt	Market of execution for last fill.	Y	N = NYSE CCG will return the actual handling market center value.
37	OrderID	Unique identifier of the cancel request, which is assigned by NYSE.	Y	If CxlRejReason = "Unknown Order", specify 'NONE' otherwise will be the ClOrdID of the order that cannot be canceled or replaced. This value does not apply to the initial order of the day.
39	OrdStatus	This value is applied after the Cancel Reject function is completed.	Y	Valid values: 8 = Rejected
41	OrigClOrdID	Unique identifier of the cancel request, which is assigned by institution.	Y	ClOrdID of the order that cannot be canceled or replaced. This value does not apply to the initial order of the day.
47	OrderCapacity	Value returned from original order	Y	Value returned from original order
58	Text	Description of rejection	Y	Fill with Reject Message text: REJ^~^UNMATCHED^CANCEL Or REJ^~^INV^CANCEL^DATA Text is limited to 25 characters. **For symbols migrated to Pillar – see Appendix for Pillar reason codes and text descriptions
60	TransactTime	GMT Transaction Time	Y	YYYYMMDD-HH:MM:SS
102	CxlRejReason	Code to identify reason for cancel rejection.	N	Valid values: 0 = Too Late To Cancel or Too Late to Cxl/Rpl 1 = Unknown order / Invalid Data 3 = Order is already in pending cancel or pending replace status. 97 = Firm Mnemonic Blocked 98 = Clearing Firm Mnemonic Blocked
207	SecurityExchange	Market used to help identify a security.	Y	N = NYSE CCG will return the actual handling market center value.
434	CxlRejResponseTo	Identifies the type of request that a Cancel Reject is in response to.	Y	1 = Order Cancel Request 2 = Order Cancel/Replace Request
	Standard Trailer		Y	

8.6 Execution Report

The FIX Execution Report message (Message Type 8) is used for the following purposes:

- To confirm the receipt of an order.
- To confirm changes to an existing order (i.e. accept cancel and replace requests).
- To relay order status and administrative information.
- To relay fill information on working orders.
- To reject orders.

FIX sends acknowledgments and unsolicited ADMIN messages as Execution Reports in the following cases:

- Confirmation of cancellation or replacement requests.
- Corrections to prices.
- Notification of busted trades.
 - Note: All busted trades will immediately be followed by a UROUT message for busted quantity.
- Notification that price is correct.

Each FIX Execution message describes the current state of the order and execution status. State changes are sent as separate messages and are not used to convey new partial fill details.

In addition to the standard FIX message header, the following fields are returned on a NYSE CCG Execution Report message type 8.

Tag	Field	Description	Req.	Values
	Standard Header		Y	MsgType = 8
1	Account	This field can be used for miscellaneous information.	N	Value returned from original order. Up to 32 alphanumeric characters. **For symbols migrated to Pillar - up to 20 alphanumeric characters. Control characters not allowed. Note: If max length is exceeded value will be truncated.
6	AvgPx	Average Price of executions	Y	Always Zero, unless the mnemonic being used is subscribed to this service. Email the Mnemonics Group if you wish to subscribe. Note: If subscribed to this service, CumQty[14] will also be enabled.
11	ClOrdID	Unique identifier of the order as assigned by order originator. CCG does not validate ClOrdID for uniqueness.	Y	The format will be BBB^NNNN/MMDDYYYY. The value for this field will be returned in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY).
14	CumQty	Total Quantity of shares executed	Y	Always Zero, unless the mnemonic being used is subscribed to this service. E-mail the Mnemonics Group if you wish to subscribe. Note: If subscribed to this service, AvgPx[6] will also be enabled.
17	ExecID	Execution ID as assigned by the exchange	Y	0 on Order Ack, Unsolicited Ack or UROUT Identifier of this report. The format is

Tag	Field	Description	Req.	Values
				BBB^NNNN/MMDDYYYY^RRRRRSSSSS where BBB is the Branch, ^ is a space, NNNN is the Sequence Number (up to 4 digits), MMDDYYYY is the original order date, ^ is a space, RRRRR is the Ref. # and SSSSS is the Seq. #. The sequence number must be padded with leading zeros, ex. 0001. Note: RRRRRSSSSS represents the Activity ID. Activity ID's for each trading day start at the value of 1. **For symbols migrated to Pillar – numeric string of up to 10 char
19	ExecRefID	Identifier used with Trade Bust and Trade Correction transactions.	N	If Activity ID is present, concatenate into ClOrdID[11]. The new Expanded Activity ID format embedded at the end of the ExecID field is available to the firms by session basis. It will increase in size to ten characters and will be formatted as follows: BBB^NNNN/MMDDYYYY^RRRRRSSSSS The expansion of the activity ID increases the number of activities on a single order from 999 to 99,999. Note: Activity ID's for each trading day start at the value of 1. **For symbols migrated to Pillar – numeric string of up to 10 char
20	ExecTransType	Identifies transaction type	Y	0 = New 1 = Cancel 2 = Correction 3 = Status
29	LastCapacity	Broker Capacity in order execution	N	1 = Agent 2 = Cross as agent 3 = Cross as principal 4 = Principal
30	LastMkt	Market of execution for last fill.	Y	N = NYSE CCG will return the actual handling market center value.
31	LastPx	Price on Execution	Y	0 on Order Ack or Unsolicited Ack Price at Execution on Partial Fill or Fill **For symbols migrated to Pillar – follows the Price Scale (either 3, 4 or 6) of the symbol published in the XDP Symbol Index Mapping Message. The expected maximum number of significant digits to the right of the decimal is 5, with zeros placed as insignificant digits to fit the applicable price scale format.
32	LastShares	Shares Executed	Y	0 on Order Ack or Unsolicited Ack

Tag	Field	Description	Req.	Values
				Shares Bought or Sold on Partial Fill or Fill
37	OrderID	Provides the CIOrdID (Tag 11) of the active order	Y	The format is BBB^NNNN/MMDDYYYY. The value for this field will be returned in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY).
38	OrderQty	Contains the order quantity from the original order	Y	Value Returned from original Order or order slice for unsolicited acks.
39	OrdStatus	Status of the order	Y	0 = New (On order acknowledgement) 1 = Partially filled (If Leaves Qty <151> is not 0.) 2 = Filled (If Leaves Qty <151> is 0.) 3 = Done for Day 4 = Canceled 5 = Replaced 6 = Pending Cancel 8 = Rejected E = Pending Replace U = Unsolicited Ack
40	OrdType	Value returned from original order	Y	Value returned from original order 1 = Market 2 = Limit 5 = Market On Close B = Limit On Close
41	OrigCIOrdID	CIOrdID of the previous order (NOT the initial order in a cancel replace chain) as assigned by the order originator, used to identify the previous order in cancel, cancel reduce and cancel/replace requests.	N	The format is BBB^NNNN/MMDDYYYY. The value for this field will be returned in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY).
44	Price	Value returned from original order	C	Value returned from original order or order slice for unsolicited acks. Not returned for Market orders. **For symbols migrated to Pillar – working price of order. Follows the Price Scale (either 3, 4 or 6) of the symbol published in the XDP Symbol Index Mapping Message. The expected maximum number of significant digits to the right of the decimal is 5, with zeros placed as insignificant digits to fit the applicable price scale format.
47	OrderCapacity	Value returned from original order	Y	Value returned from original order
54	Side	Value returned from original order	Y	Value returned from original order
55	Symbol	Value returned from original order	Y	Value returned from original order
58	Text	Free format text string	N	Text is limited to 40 characters. For new unsolicited acks, the text “New MEOrderID Acknowledgement” will be returned. **For symbols migrated to Pillar – see Appendix for Pillar reason codes and text descriptions
59	TimeInForce	Value returned from original order	Y	Value returned from original order

Tag	Field	Description	Req.	Values
60	TransactTime	GMT Transaction Time	Y	YYYYMMDD-HH:MM:SS Note: Reports returned from Broker Systems currently return Local Time.
63	SettlmntTyp	Indicates order settlement period	N	0 = Regular 1 = Cash 2 = Next Day 8 = Seller's Option Note: Values 1, 2 and 8 are only valid on orders routed to Broker UTP. If 63=8, then tag 287 must also be present.
65	SymbolSfx	Additional information about the security (e.g. preferred, warrants, etc.)	N	Value returned from original order
76	ExecBroker	Identifies executing / give-up broker.	N	Standard NASD market-maker mnemonic is preferred. Contains either the clearing number or badge number, if present. **For symbols migrated to Pillar – only populated with broker IntroducingBadgeID from the incoming order if applicable; if not, tag is not sent
102	CxlRejReason	Cancel Reject reason	N	Code to identify reason for cancel rejection. The following valid values are supported by NYSE: Valid values: 0 = Too Late To Cancel 1 = Unknown order / Invalid Data 3 = Order is already in pending cancel or pending replace status
103	OrdRejReason	Order Reject reason	N	Code to identify reason for order rejection. The following valid values are supported by NYSE: Valid values: 0 = Broker Option 1 = Unknown Symbol 2 = Exchange Closed 3 = Exceeds Limit/Invalid Data 4 = Too Late To Enter 5 = Unknown Order 6 = Duplicate Order 97 = Firm Mnemonic Blocked 98 = Clearing Firm Mnemonic Blocked 99 = Other (only for orders sent directly to a Broker's HandHeld)
109	ClientID	4 byte alphanumeric MPID value	C	Contains the Sending firm's Market Participant ID (MPID). Control characters not allowed. Required when routing new and cancel/replace messages to Broker Systems. Returned on acknowledgements, replaces, executions, and order drop copy messages. Required when designating an order with Self Trade Prevention (Tag 7928) to the Trading Engine.

Tag	Field	Description	Req.	Values
				Returned on all order and cancel/replacement activities and drop copies only.
150	ExecType	Execution Type	Y	0 = New 1 = Partially filled 2 = Filled 3 = Done for Day 4 = Canceled 5 = Replaced 6 = Pending Cancel 8 = Rejected E = Pending Replace U = Unsolicited Ack
151	LeavesQty	Leaves remaining on order	Y	Current open quantity of an order (original OrderQty minus total executed quantity) For cancel acknowledgements, the value returned is zero.
207	SecurityExchange	Market used to help identify a security.	Y	N = NYSE CCG will return the actual handling market center value.
287	SellerDays	Indicates number of days for Seller's Option settlement type.	C	Specifies the number of days that may elapse before delivery of the security. This tag is required if tag 63=8. Valid values are 2 – 60.
337	ContraTrader	Identifies the trader of the Contra Broker.	N	Contra Trader Identifier For UTP executions, will contain value of "0000". For Broker System executions, will contain the executing Broker Badge number.
375	ContraBroker	Identifies the Contra side of the trade.	N	Contra Broker Identifier Execution Reports will contain 'ANON' in this field for NYSE executions. Away Market executions will always contain AHX. **For symbols migrated to Pillar – always set to 'ANON' regardless of whether the order executed on NYSE or was entered on NYSE, then routed and executed at an away market
382	NoContraBrokers	Number of Contra Brokers repeating group instances. Required if the value for NoContraBrokers [382] is greater than 0.	N	Number of Contra Brokers
437	ContraTradeQty	Quantity traded with the Contra Broker.	N	Share Quantity Traded with Contra

Tag	Field	Description	Req.	Values
438	ContraTradeTime	Indicates the Execution time in hours and minutes	N	HHMMSS (CBS) HHMM (UTP)
439	ClearingFirm	Optional field: names the clearing member designated by another clearing or non-clearing member for settlement of its Exchange transactions.	N	Clearing Member Identifier **For symbols migrated to Pillar – tag not supported
7928	SelfTradeType	Used to prevent the order from trading against another order with the same ClientId (MPID).	N	“N” – Cancel Newest (or arriving order) “O” – Cancel Oldest (or resting order) Returned on all order or cancel/replacement activities originally designated as STP.
9421	MEOrderID	Matching Engine Order ID – unique numeric value assigned by ME to each individual order slice.	C	Returned if subscribed. 10 digit numeric Exchange assigned order id (unique by symbol).
9425	StatusResp	Trade correction or busted trade information	N	Admin responses generated as a result of the Execution Report Correction (ERC) information: 1 = Busted Trade 3 = Corrected Price 4 = Price is Correct 5 = Report CHG If StatusResp [9425] is present, Side [54] must appear representing the past tense of the order instruction.
9426	BillingRate	Consolidated billing information.with the additional Billing Tier information	C	Returned on execution reports. Required to receive new MPL billing values. 1 = Taker 2 = Provider 3 = Blended 4 = Market on Close and Market Orders Executed in Close 5 = Opening/Provider 6 = Closing/Provider customer execution, or dQuote executed in Close if received between 3:35 – 3:57 pm* 7 = Limit on Close 8 = Retail Order Provider 9 = Retail Order Taker 10 = RPL - Retail Taker MPL**For symbols migrated to Pillar – not supported 11 = MPL Taker 12 = MPL Provider 13 = RET – Retail Firm Provider 14 = RET – Retail Firm MPL Taker 15 = Closing Offset 16 = Closing early D-Quote (received prior to 3:35 PM)* 17 = Closing late D-Quote (received after 3:57 pm)* 18 = Participated in NYSE Floor Broker Cross execution *For days on which the market closes early, these

Tag	Field	Description	Req.	Values
				times will be adjusted accordingly (between 25 and three minutes before the close; 25 minutes before the close; three minutes before the close).
9430	AutoExInd	Routing Code	N	Value = NX If present, indicates the trade was executed automatically. **For symbols migrated to Pillar – tag not supported
9433	Execution Information	Indicates the Executing DMM's/Executing Broker's number.	N	Executing DMM's/Executing Broker's number
9436	MemoAB	Relative to NYSE Rule 108(a), Tag 9436 is used to indicate Parity/ No Parity. Tag 9436 is also used to indicate whether a Report was part of a Cross transaction.	N	10 character field; a period is returned for any character not entered.
9440	ERCReferenceNumber	Execution Report Change Reference ID	N	Format: RRRRRSSSSS Sent in Execution Reports for orders sent to Broker UTP
9483	DBExeclD	Associates all buy and sell execution reports and tape prints in the Display Book trade. **For symbols migrated to Pillar – populated with the Pillar TradeID (unbundled, unique identifier provided to both sides of the trade).	N	6 Numeric Characters **For symbols migrated to Pillar – numeric string of up to 10 char
9487	RoutingInstruction	Routing Instructions	N	ISO = Inter-Market Sweep DNS = Do Not Ship SOC = NMS IOC CO = Closing Offset Order **For symbols migrated to Pillar – available for Tape A securities only RPI = Retail Price Improvement Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update RTO = Retail Only Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update as Limit only; Market not supported RTNR = Retail Non-Routable Order **For symbols migrated to Pillar – not supported RTR = Retail Routable Order **For symbols migrated to Pillar – not supported ALO = Add Liquidity Only ISO ALO – Add Liquidity Only Intermarket Sweep Order Note: When using Tag 9487, Tag 57 cannot also be present
9570	ExecAwayMktId	Contains The Market Center ID (see valid values below) and, optionally, the Market Maker ID separated by a slash (e.g., D/EDGA).	N	A = NYSE American B = Nasdaq BX C = National Stock Exchange D = FINRA ADF F = Algo order executed at NYSE Group G = Algo order executed Away

Tag	Field	Description	Req.	Values
		If this tag is present, Tag 9578 will not be present.		H = MIAX I = International Securities Exchange J = Direct Edge A (EDGA) K = Direct Edge X (EDGX) L = LTSE M = Chicago Stock Exchange N = New York Stock Exchange P = NYSE Arca Exchange T = Nasdaq U = MEMX V = Investors' Exchange (IEX) W = Chicago Board Options Exchange X = Nasdaq PSX Y = BATS Y Z = BATS Exchange
9578	BillingIndicator	Execution Report Billing Indicators If this tag is present, Tag 9570 will not be present.	N	1 = Taker 2 = Provider 3 = Blended 4 = Market on Close and Market Orders Executed in Close 5 = Opening/Provider 6 = Closing/Provider customer execution, or dQuote executed in Close if received between 3:35 – 3:57 pm* 7 = Limit on Close 8 = RLP - Retail Order Provider 9 = RLP - Retail Order Taker *For days on which the market closes early, this time will be adjusted accordingly (between 25 and three minutes before the close).
9579	ExpERCReferenceNumber	Expanded Activity ID	N	Format: RRRRRSSSSS *Will contain the activity id embedded in the ExecID field. (Will appear on execution report change messages) **For symbols migrated to Pillar – numeric string of up to 10 char
9704	PrevExpERCReferenceNumber	Expanded Activity ID referencing execution report being modified	N	Format: RRRRRSSSSS *Will contain the activity id embedded in the ExecRefID field. (Will appear on execution report change messages) **For symbols migrated to Pillar – numeric string of up to 10 char
	Standard Trailer		Y	

9 Failure Recovery

In the event of CCG gateway failure or hardware failure resulting in a non-recoverable scenario of CCG, the application rolls to the spare server. The spare server assumes the IP of the failed server and the data volume is mounted (shown in figure 2). This recovery process is completely transparent to the clients connected to that gateway.

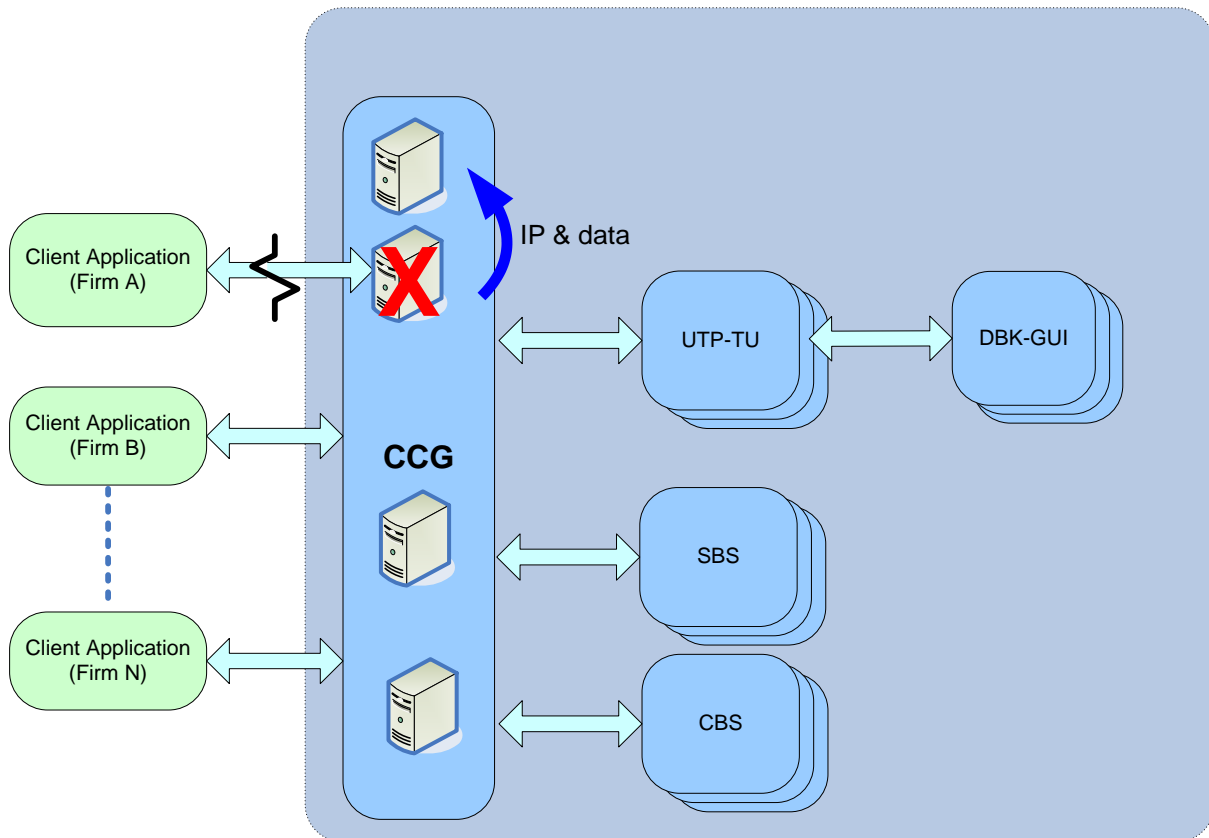


Figure 2: CCG FIX – Failure Recovery

The CCG will start accepting incoming connections after the recovery has been completed. Subsequent attempts to connect to the server will be successful (shown in figure 3). The application level recovery will be handled by the gateway and the client based on the sequence number of the messages last received on either side and is detailed in the next section.

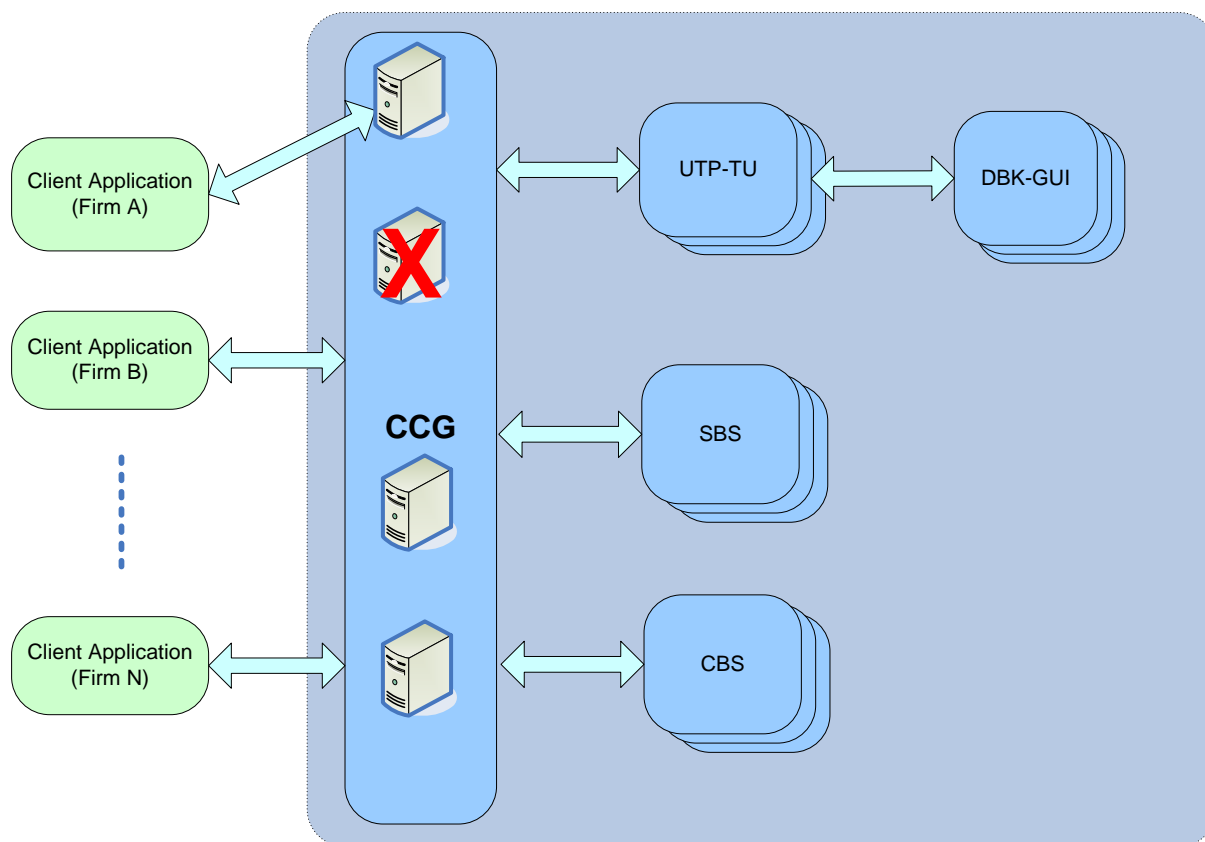


Figure 3: CCG FIX – After Recovery

10 NYSE Equities Order Types

**For symbols migrated to Pillar - for information on the functional changes to various order types that will take effect for symbols migrated to NYSE Pillar, please see: [Functional Differences between NYSE Group Equities Platforms](#).

Order Type	FIX tags	Description
Market Order	OrdType (40) = 1 (market) TimeInForce (59) = 0 (Day)	An order to buy or sell that is to be executed at the best price obtainable. **For symbols migrated to Pillar - MinQty and MinimumTriggerVolume not supported on market order
Limit Order	OrdType (40) = 2 (limit)	An order to buy or sell at a specified price or better. A marketable limit order is a limit order to buy/sell at or above/below the consolidated best offer/bid for the security.
Sell Short Order	OrdType (40) = 1 (market) or 2 (limit) Side (54) = 5 (Sell Short)	A limit or market order to sell short a security not owned by the seller. The short sale rules apply to all traders using this function.
Sell Short Exempt Order	OrdType (40) = 1 (market) or 2 (limit) Side (54) = 6 (Sell Short Exempt)	A limit or market order to sell short a security that is exempt current Sell Short restrictions.
Day Order	OrdType (40) = 1 (market) or 2 (limit) TimeInForce (59) = 0 (Day)	A market or limit order that, if not executed, expires at the end of the trading day on which it was entered.
IOC (Immediate Or Cancel)	OrdType (40) = 2 (limit) TimeInForce (59) = 3 (IOC)	A limit order that trades immediately and automatically cancels any unfilled portion. These orders will route to protected quotes, if the order cannot be executed at the NYSE.
Minimum Trade Size Order	OrdType (40) = 2 (limit) TimeInForce (59) = 3 (IOC) MinQty (110) >= 0 OR MinimumTriggerVol (9568) = value equal to or less than order quantity, or zero **for symbols migrated to Pillar only; see note at right	A Minimum Trade Size Quantity for orders with a Time in Force of "IOC" **For symbols migrated to Pillar: <ul style="list-style-type: none"> - If specified on Limit IOC order, MinimumTriggerVol or MinQty must be at least one round lot, less than or equal to OrderQty (or zero), and sent with RoutingInstruction (9487) = SOC - Limit IOC entered with BOTH MinimumTriggerVolume and MinQty is rejected Beginning on a date announced via Trader Update: <ul style="list-style-type: none"> - Limit IOC entered with MinimumTriggerVolume is handled as Minimum Fill order - Limit IOC entered with MinQty is handled as Minimum Trade Size order - For details, see Functional Differences between NYSE Group Equities Platforms
Block Reserve Order	OrdType (40) = 2 (limit) MaxFloor (111) = (show size)** TimeInForce (59) = 0 (Day)	A limit order with a minimum published amount of 100 shares that replenishes at the minimum or at a different amount set by the user after each execution. Both the displayed portion and hidden reserve portion will participate in all electronic executions. **For symbols migrated to Pillar - Reserve order may only be entered with MaxFloor = a multiple of the symbol's round lot

Order Type	FIX tags	Description
		parameter. Mixed lots are rejected
Dark Reserve Order	OrdType (40) = 2 (limit) MaxFloor (111) = 0 (Zero) TimeInForce (59) = 0 (Day) Optional: **For symbols migrated to Pillar only; see note at right MinQty (110) = value equal to or less than order quantity, or zero OR MinimumTriggerVol (9568) = value equal to or less than order quantity, or zero **for symbols migrated to Pillar only; see note at right	A limit order with zero published quantity that will not be displayed to the DMM or in NYSE OpenBook®. Dark Reserve orders can be priced at, between or outside the displayed quote. This order type will not participate in manual, floor based trades, including the opening and closing trades, but will participate in all electronic executions. All dark reserve orders entered prior to the open will receive an unsolicited cancel, so as not to trigger “a clean-up trade” after the opening trade when the DMM is making an aftermarket. **For symbols migrated to Pillar: - Reserve order may only be entered with MaxFloor = a multiple of the symbol’s round lot parameter. Mixed lots are rejected Beginning on a date announced via Trader Update: - If specified, MinimumTriggerVol or MinQty must be at least one round lot and less than or equal to OrderQty (or zero)Non-Displayed Limit order entered with MinimumTriggerVolume is handled as Minimum Fill order - Non-Displayed Limit order entered with MinQty is handled as Minimum Trade Size order - For details, see Functional Differences between NYSE Group Equities Platforms
Intermarket Sweep Order (ISO)	OrdType (40) = 2 (limit) Side (54) = 1, 2, 5, or 6 TimeInForce (59) = 0 (Day) or 3 (IOC) RoutingInst. (9487) = ISO Note: Tag 57 cannot be present	A limit order that trades at the NYSE only and will trade through even when another market center is publishing a better quotation. When sending an Intermarket Sweep Order, the sender fulfills RegNMS order-protection obligations and NYSE Rules by concurrently sending orders to market centers with better prices. **For symbols migrated to Pillar: - Reserve quantity (MaxFloor) not supported on ISO order - MinQty and MinimumTriggerVolume not supported on ISO order
Trade-at Intermarket Sweep Order (Trade-at ISO)	OrdType (40) = 2 (limit) Side (54) = 1, 2, 5, 6 TimeInForce (59) = 3 (IOC) Execlnst (18) = y (Trade-at ISO) Note: Tag 57 cannot be present	An immediate or cancel limit order that trades at the NYSE only, and may trade against undisplayed liquidity at a price equal to the limit price of the inbound Trade-at ISO order. The Exchange may rely on the order sender to have satisfied all Protected Quotations better than or equal to the limit price of the Trade-at ISO order. **For symbols migrated to Pillar - MinQty and MinimumTriggerVolume not supported on Trade-at ISO order
Intermarket Sweep Order Add Liquidity Only (ISO ALO)	OrdType (40) = 2 (limit) Side (54) = 1 (Buy), 2 (Sell), 5 (Sell Short) or 6 (Sell Short Exempt) TimeInForce (59) = 0 (Day) RoutingInst (9487) = ISO ALO Note: Tag 57 cannot be present	An limit day order that trades at the NYSE only and on arrival will trade through even when another market center is publishing a better quotation only if adding liquidity. Any remaining portion will then be placed on the Order book and will reprice when necessary in order to avoid taking liquidity. Note: When sending an Intermarket Sweep Order, the sender fulfills RegNMS order-protection obligations and NYSE Rules by concurrently sending orders to market centers with better prices upon arrival. **For symbols migrated to Pillar - Reserve quantity (MaxFloor) not supported on ISO ALO order

Order Type	FIX tags	Description
RegNMS Immediate or Cancel Order (SOC)	OrdType (40) = 2 (limit) TimeInForce (59) = 0 (Day) or 3 (IOC) RoutingInst. (9487) = SOC Note: Tag 57 cannot be present	A limit immediate or cancel order that is to be executed in whole or in part on the NYSE only. This type of IOC order will not trade through protected quotes.
Do Not Ship (DNS)	OrdType (40) = 2 (limit) TimeInForce (59) = 0 (Day) RoutingInst. (9487) = DNS Note: Tag 57 cannot be present	A limit Day order that is to be executed in whole or in part by the NYSE only. The portion not executed is quoted, and in the event the order would require routing to an away market center, it would be immediately cancelled. **For symbols migrated to Pillar - MinQty and MinimumTriggerVolume not supported on DNS order
Closing Offset (CO) **For symbols migrated to Pillar – available for Tape A securities only	OrdType (40) = 2 (limit) TimeInForce (59) = 0 (Day) RoutingInst. (9487) = CO Note: Tag 57 cannot be present	A limit Day order that can only execute at the close to offset a market imbalance.
Opening Only Order	<u>Market</u> OrdType (40) = 1 (Market) TimeInForce (59) = 2 (OPG) Or <u>Limit</u> OrdType (40) = 2 (Limit) TimeInForce (59) = 2 (OPG)	A market or limit order that is to be routed as an on open order to participate in the market opening or reopening process. Any balance not executed following the opening trade is cancelled. OPG orders entered after the market open are automatically cancelled. **For symbols migrated to Pillar - MinQty and MinimumTriggerVolume not supported on Opening Only orders
Market On Close (MOC)	OrdType (40) = 5 (market on close)	A market order that is to be executed only during the closing auction.
Limit on Close (LOC)	OrdType (40) = B (limit on close)	A limit DAY order that is entered for execution at the closing price, and if not so executed, is to be treated as cancelled.
Retail Price Improvement (RPI) **For symbols migrated to Pillar – available beginning on a date announced via Trader Update	OrdType (40) = 2 (limit) Side (54) = 1, 2, 5, or 6 TimeInForce (59) = 0 (Day) RoutingInst. (9487) = RPI Note: OffsetPrice (9403) is required for this order type. Note: LMT Price is allowed in sub-pennies for values greater than \$1.00 and less than \$1.00, but must be in multiples of the minimum offset price (currently defined as \$0.0010). Note: Not allowed for Z-mnemonics	Will only trade with Retail Taker orders. Incoming RPI interest in sub-pennies is accepted—however, any RPI interest that would result in an execution below \$1.00 will be prevented from trading.

Order Type	FIX tags	Description
Retail Taker Type 1 Retail Only (RTO) **For symbols migrated to Pillar – available beginning on a date announced via Trader Update as Limit only; Market not supported	OrdType (40) = 1 (market) or 2 (limit) **See note at left Side (54) = 1, 2, 5, or 6 TimeInForce (59) = 0 (Day) or 3 (IOC) RoutingInst. (9487) = RTO Note: Not allowed for Z-mnemonics	Retail Taker order that only trades against Retail Price Improvement (RPI) orders. All Retail Taker orders are treated as IOC.
Retail Taker Type 2 Retail Non-Routable (RTNR) **For symbols migrated to Pillar – not supported	OrdType (40) = 1 (market) or 2 (limit) Side (54) = 1, 2, 5, or 6 TimeInForce (59) = 0 (Day) or 3 (IOC) RoutingInst. (9487) = RTNR Note: Not allowed for Z-mnemonics	A DNS Retail Taker order that interacts with Retail Providing interest and/or other interest that resides on the limit order book. All Retail Taker orders are treated as IOC.
Retail Taker Type 3 Retail Routable (RTR) **For symbols migrated to Pillar – not supported	OrdType (40) = 1 (market) or 2 (limit) Side (54) = 1, 2, 5, or 6 TimeInForce (59) = 0 (Day) or 3 (IOC) RoutingInst. (9487) = RTR Note: Not allowed for Z-mnemonics	Retail Taker order that interacts with Retail Providing interest, other interest that resides on the limit order book and/or can be routed away to other markets for execution. All Retail Taker orders are treated as IOC.
SelfTrade Prevention Order (STP)	OrdType (40) = 1 (market), 2 (limit), 5 (MOC) or B (LOC) Side (54) = 1, 2, 5, or 6 TimeInForce (59) = 0 (Day) or 3 (IOC) SelfTradeType (7928) = N or O ClientID (109) = must be present.	Customer order designation that prevents two orders with the same ClientID (MPID) from trading against each other on the NYSE Market. Notes: Opening (OPG), Market on Close (MOC) and Limit on Close (LOC) orders will not be validated for Self-Trade Prevention. MinQty (110) designation invalid for STP order.
Mid-Point Passive Liquidity Order (MPL)	OrdType (40) = 2 (limit) Side (54) = 1, 2, 5, or 6 TimeInForce (59) = 0 (Day) or 3 (IOC) Price (44) = must be greater than \$1.00 (sub-pennies are invalid) ExecInst (18) = M (Mid-Point Peg)	An undisplayed limit order that will provide price improvement by executing at the mid-point of the Protected BBO. May optionally contain the STP order designation. May optionally contain a Minimum Trigger Volume (MTV). If designated as ALO, OrderQty must be equal to or greater than one round lot.

Order Type	FIX tags	Description
	<p>Optional:</p> <p>MinimumTriggerVol (9568) = value equal to or less than order quantity, or zero **See note at right</p> <p>OR</p> <p>MinQty (110) = value equal to or less than order quantity, or zero **for symbols migrated to Pillar only; see note at right</p> <p>RoutingInstruction (9487) = May contain one of the following: ALO, DNS, or SOC</p>	<p>MPL with RoutingInstruction SOC must be entered with TimeInForce of IOC.</p> <p>**For symbols migrated to Pillar:</p> <ul style="list-style-type: none"> - MPL IOC must be entered with OrderQty of at least one round lot - If specified, MinimumTriggerVol or MinQty must be at least one round lot, and less than or equal to order quantity (or zero) - MPL entered with BOTH MinimumTriggerVolume and MinQty is rejected <p>Beginning on a date announced via Trader Update:</p> <ul style="list-style-type: none"> - MPL entered with MinimumTriggerVolume is handled as Minimum Fill order - MPL entered with MinQty is handled as Minimum Trade Size order - For details, see Functional Differences between NYSE Group Equities Platforms
Add Liquidity Only Order (ALO)	<p>OrdType (40) = 2 (limit)</p> <p>Side (54) = 1, 2, 5, or 6</p> <p>Quantity = one round lot or greater.</p> <p>TimeInForce (59) = 0 (Day)</p> <p>Execlnst (18) = M (Optional).</p> <p>RoutingInstruction (9487) = ALO</p>	<p>A limit or limit on close order that expresses intent to add liquidity only. Interest will automatically reprice to prevent taking liquidity.</p> <p>May optionally contain the STP order designation.</p> <p>May optionally contain a DOT Reserve Indicator and MaxFloorQty.</p> <p>If MaxFloorQty is entered, must be greater than 0.</p> <p>**For symbols migrated to Pillar – ALO with MaxFloorQty not supported</p>

Appendix A: CCG FIX Field Definitions

The following is a catalog of FIX 4.2 fields used to define the NYSE CCG application and session protocol messages.

Tag	Field	Format	Values
1	Account	String	32 character account information field. **For symbols migrated to Pillar - up to 20 alphanumeric characters. Control characters not allowed. Note: If max length is exceeded value will be truncated.
6	AvgPx	Price	The average price of the executions on the order. NYSE will return this tag with a value of "0", unless the mnemonic being used is subscribed to this service. E-mail the Mnemonics Group if you wish to subscribe. Note: If subscribed to this service, CumQty[14] will also be enabled.
7	BeginSeqNo	int	Message sequence number of first message in range to be present
8	BeginString	String	Identifies beginning of new message and protocol version. ALWAYS FIRST FIELD IN MESSAGE. (Always unencrypted) Valid values: FIX.4.2 Note: CCG only supports FIX 4.2.
9	BodyLength	int	Message length, in bytes, forward to the CheckSum field. ALWAYS SECOND FIELD IN MESSAGE. (Always unencrypted)
10	Checksum	String	Three byte, simple checksum . ALWAYS LAST FIELD IN MESSAGE; i.e. serves, with the trailing <SOH>, as the end-of-message delimiter. Always defined as three characters. (Always unencrypted)
11	ClOrdID	String	Identifier of the order as assigned by order originator. This field is used for access to the FIX Order File. Format: BBB^NNNN/MMDDYYYY . Branch code is 2 to 3 alpha characters followed by a 1 space delimiter and a sequence number up to 4 digits which does not need to be zero prefixed. However, if sequence is populated with less than 4 digits, all subsequent msgs returned will be prefixed to return a 4 digits value in the sequence portion. Each user is required to guarantee that the same Branch and Sequence number combination is not used by the SAME user more than once in a single processing day within a group of sessions using the same mnemonic. Violating this rule causes the order to be rejected by CCG. Branch Codes less than 2 characters are rejected. CCG does not validate ClOrdID for uniqueness. The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY). Note: HMQ, YYY, RRR, ZZZ, TTT, QQQ, ZYY, ZYZ or ZYX should not be used; NYSE rejects transmission with these branch codes since they are reserved. CCG Note: No leading or trailing blanks or special characters are allowed.

Tag	Field	Format	Values
14	CumQty	Qty	<p>The total quantity of shares executed. NYSE will return this tag with a value of "0", unless the mnemonic being used is subscribed to this service.</p> <p>E-mail the Mnemonics Group if you wish to subscribe.</p> <p>Note: If subscribed to this service, AvgPx[6] will also be enabled.</p>
16	EndSeqNo	int	<p>Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "0" (representing infinity).</p>
17	ExecID	String	<p>Identifier of this report. The format is BBB^NNNN/MMDDYYYY^RRRRSSSSS</p> <p>where BBB is the Branch, ^ is a space, NNNN is the Sequence Number (up to 4 digits), MMDDYYYY is the original order date, ^ is a space, RRRRR is the Ref. # and SSSSS is the Seq. #. The sequence number must be padded with leading zeros, ex. 0001.</p> <p>Note: RRRRRSSSSS represents the Activity ID. Activity ID's for each trading day start at the value of 1.</p> <p>Identifier of execution message as assigned by NYSE is 0 (zero) for ExecTransType=3 (Status).</p> <p>For an Order Reject, is set to 0 .</p> <p>A value of 0 will generate a "UR OUT" report since there is no execution.</p> <p>**For symbols migrated to Pillar – numeric string of up to 10 char</p>
18	ExecInst	Multiple Value String	<p>Instructions for order handling on exchange trading floor.</p> <p>Valid Values:</p> <p>M = Mid-Price Peg (MPL)</p> <p>y = Trade-at ISO</p> <p>Note: Tag 18 is not supported for orders routed to Broker Systems.</p>
19	ExecRefID	String	<p>Reference identifier used with Cancel and Correct transaction types. If Activity ID is present concatenate into ClOrdId[11].</p> <p>The new Expanded Activity ID format embedded at the end of the ExecID field is available to the firms by session basis. It will increase in size to ten characters and will be formatted as follows:</p> <p>BBB^NNNN/MMDDYYYY^RRRRSSSSS</p> <p>The expansion of the activity ID increases the number of activities on a single order from 999 to 99,999.</p> <p>**For symbols migrated to Pillar – numeric string of up to 10 char</p>

Tag	Field	Format	Values
20	ExecTransType	char	<p>Identifies transaction type.</p> <p>Valid values:</p> <p>0=New</p> <p>1=Cancel</p> <p>2=Correct</p> <p>3=Status</p> <p>For an Execution Report, set to 0 for New .</p> <p>For a Cancel with Replacement, with a LeavesQty[151] greater than 0, set to 0 for New .</p> <p>For a straight Cancel, set to 0 for New .</p> <p>Done for Day messages will contain a value of [0]</p>
29	LastCapacity	char	<p>Broker capacity in order execution</p> <p>Valid values:</p> <p>1 = Agent</p> <p>2 = Cross as agent</p> <p>3 = Cross as principal</p> <p>4 = Principal</p>
30	LastMkt	Exchange	<p>Market of execution for last fill.</p> <p>N = NYSE</p> <p>CCG will return the actual handling market center value.</p>
31	LastPx	Price	<p>Price of this (last) fill.</p> <p>Field not required for ExecTransType = 3 (Status)</p> <p>**For symbols migrated to Pillar – follows the Price Scale (either 3, 4 or 6) of the symbol published in the XDP Symbol Index Mapping Message. The expected maximum number of significant digits to the right of the decimal is 5, with zeros placed as insignificant digits to fit the applicable price scale.</p>
32	LastShares	Qty	<p>Quantity of shares bought/sold on this (last) fill.</p> <p>Field not required for ExecTransType = 3 (Status)</p> <p>(Prior to FIX 4.2 this field was of type int)</p>
34	MsgSeqNum	int	Integer message sequence number.
35	MsgType	String	<p>Defines message type.</p> <p>ALWAYS THIRD FIELD IN THE MESSAGE. (Always unencrypted)</p> <p>The following valid message types are supported by NYSE:</p> <p>0 = Heartbeat</p> <p>1 = Test Request</p> <p>2 = Resend Request</p> <p>3 = Reject</p> <p>4 = Sequence Reset</p> <p>5 = Logout</p> <p>8 = Execution Report</p> <p>9 = Order Cancel Reject</p> <p>A = Logon</p> <p>D = Order – Single</p> <p>F = Order Cancel Request</p> <p>G = Order Cancel/Replace Request</p>
36	NewSeqNo	int	New sequence number.

Tag	Field	Format	Values
37	OrderID	String	<p>Unique identifier for Order as assigned by NYSE. Uniqueness must be guaranteed within a single trading day. Firms which accept multi-day orders should consider embedding a date within the OrderID field to assure uniqueness across days.</p> <p>The format is BBB^NNNN/MMDDYYYY. Branch code is 2 to 3 alpha, 1 space delimiter; sequence number is up to 4 numerics, cannot be all zeros. (Note: The sequence number must be padded with leading zeros, ex. 0001.)</p> <p>OrdId is defined as BBB two to three alpha characters (representing the Branch code) one space delineator and NNNN is up to four numeric characters (representing the Sequence number).</p> <p>Each user is required to guarantee that the same Branch and Sequence number combination is not used by the SAME user more than once in a single processing day within a group of sessions using the same mnemonic.</p> <p>Violating this rule causes the order to be rejected.</p> <p>Branch Codes less than 2 characters are rejected.</p> <p>The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY).</p> <p>Note: HMQ, YYY, RRR, ZZZ, TTT, QQQ, ZYY, ZYZ or ZYX should not be used; NYSE rejects transmission with these branch codes since they are reserved.</p>
38	OrderQty	Qty	<p>Number of shares trading:</p> <p>1 – 25,000,000 to Matching Engine.</p> <p>**For symbols migrated to Pillar:</p> <ul style="list-style-type: none"> 1 – 25,000,000 for Auction only order types (Opening Only/MOO, LOO; MOC, LOC, Closing Offset) 1 – 5,000,000 for all other order types <p>1 – 99,000,000 for all Broker Systems</p>
39	OrdStatus	char	<p>Identifies current status of order.</p> <p>The following valid values are supported by NYSE:</p> <p>Valid values:</p> <p>0 = New</p> <p>1 = Partially filled</p> <p>2 = Filled</p> <p>3 = Done for Day</p> <p>4 = Canceled</p> <p>5 = Replaced</p> <p>6 = Pending Cancel</p> <p>8 = Rejected</p> <p>E = Pending Replace</p>
40	OrdType	char	<p>OrdType provides basic information about the equity order. Order type can be combined with price information.</p> <p>The following valid values are supported by NYSE:</p> <p>1 = Market</p> <p>2 = Limit</p> <p>5 = Market on close</p> <p>B = Limit On Close</p>
41	OrigClOrdID	String	<p>The format is BBB^NNNN/MMDDYYYY. Branch code is 2 to 3 alpha, 1 space delimiter; sequence number is up to 4 numerics, cannot be all zeros.. The sequence number must be padded with leading zeros, ex. 0001.</p>

Tag	Field	Format	Values
			<p>OrigClOrdId is defined as BBB two to three alpha characters (representing the Branch code) one space delineator and NNNN is up to four numeric characters (representing the Sequence number).</p> <p>Each user is required to guarantee that the same Branch and Sequence number combination is not used by the SAME user more than once in a single processing day within a group of sessions using the same mnemonic.</p> <p>Violating this rule causes the order to be rejected.</p> <p>Branch Codes less than 2 characters are rejected.</p> <p>The value for this field must be in UPPERCASE (e.g. BBB^NNNN/MMDDYYYY).</p> <p>Note: HMQ, YYY, RRR, ZZZ, TTT, QQQ, ZYY, ZYZ or ZYX should not be used; NYSE rejects transmission with these branch codes since they are reserved.</p>
43	PossDupFlag	Boolean	<p>Indicates possible retransmission of message with this sequence number</p> <p>Valid values :</p> <p>Y = Possible duplicate</p> <p>N = Original transmission</p>
44	Price	Price	Order's limit price. **For symbols migrated to Pillar – working price of order
45	RefSeqNum	int	Reference message sequence number
47	OrderCapacity		Represents the Account Type, which reflects the type of trade as well as the relationship between the beneficial owner of the account and the member organization clearing the trade. Reference Appendix B for valid values and definitions
49	SenderCompID	String	<p>(Always unencrypted). Identifies the session.</p> <p>Assigned by NYSE Technology Member Services and Connectivity Groups.</p> <p>On output is defined as CCG.</p>
50	SenderSubID	String	Assigned value used to identify specific message originator (desk, trader, etc.)
52	SendingTime	Time Stamp	Time of message transmission in GMT format: YYYYMMDD-HH:MM:SS
54	Side	char	<p>Side of order</p> <p>Valid values:</p> <p>1 = Buy</p> <p>2 = Sell</p> <p>5 = Sell Short</p> <p>6 = Sell Short Exempt</p>
55	Symbol	String	Ticker symbol as defined by the NYSE.
56	TargetCompID	String	<p>On input is defined as CCG.</p> <p>Identifies the target application.</p>

Tag	Field	Format	Values
57	TargetSubID	String	<p>Required if TargetLocationID [143] is present. Represents the valid NYSE routing codes. Valid Values: 4 = Broker Routed Orders 7 = AutoEx</p> <p>Value of "4" is required for all orders, cancels, cancel replaces and cancel reduces routed to Broker UTP.</p>
58	Text	String	<p>Free format text string. On Order messages, up to 25 characters. Control characters not allowed. On Report messages up to 40 characters.</p>
59	TimeInForce	char	<p>Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. The value of 4(FOK) is not supported and a reject message with Text [58] set to Service unavailable for <symbol> is returned. The value of 6 is not supported and a Reject message with Text [58] set to Good till date not supported is returned.</p> <p>The following valid values are supported by NYSE: 0 = Day 2 = OPG (At the Opening) 3 = IOC (Immediate Or Cancel)</p>
60	TransactTime	GMT Time Stamp	<p>Time of execution/order: YYYYMMDD-HH:MM:SS</p>
63	SettlmntTyp	char	<p>Indicates order settlement period. Absence of this field is interpreted as Regular. Regular is defined as the default settlement period for the particular security on the exchange of execution.</p> <p>The following valid values are supported by NYSE: Valid values: 0 = Regular 1 = Cash 2 = Next Day 8 = Seller's Option</p> <p>Note: Values 1, 2 and 8 are only valid on orders routed to Broker UTP. If 63=8, then tag 287 must also be present.</p>
65	SymbolSfx	String	<p>Additional information about the security (e.g. preferred, warrants, etc.). See Section 4.1 for valid values.</p>
76	ExecBroker	String	<p>Identifies executing / give-up broker. Standard NASD market-maker mnemonic is preferred. Contains either the clearing number or badge number, if present.</p>
90	SecureDataLen	int	<p>Length of encrypted message</p>
91	SecureData	data	<p>Actual encrypted data stream</p>
93	SignatureLength	int	<p>Number of bytes in signature field.</p>
95	RawDataLength	int	<p>The number of bytes in a raw data field.</p> <p>May contain the value of "1" or "2" depending upon subscription</p>

Tag	Field	Format	Values
			settings in Tag 96.
96	RawData	int	<p>Unformatted raw data</p> <p>Valid Values:</p> <p>Position 1 – Subscription to Cancel on Disconnect</p> <p>0 = Not Subscribed</p> <p>1 = Activate Cancel on Disconnect</p> <p>Position 1 – Subscription to Cancel on Disconnect</p> <p>0 = Not Subscribed</p> <p>1 = Activate Cancel on Disconnect for orders sent to UTP only</p> <p>2 = Activate Cancel on Disconnect for orders sent to Broker UTP only</p> <p>3 = Activate Cancel on Disconnect for orders sent to both UTP and Broker UTP</p> <p>Position 2 – Subscription to Unsolicited Acknowledgements</p> <p>0 = Not Subscribed</p> <p>1 = Activate Unsolicited Order Acknowledgments</p> <p>Example 1 : Tag 96 = 11 (Activate both Cancel on Disconnect for orders sent to UTP, and Unsolicited Order Acknowledgments)</p> <p>Example 2: Tag 96 = 01 (Not subscribed to Cancel on Disconnect but Activated for Unsolicited Order Acknowledgments).</p>
97	PossResend	Boolean	<p>Indicates that message may contain information that has been sent under another sequence number.</p> <p>Valid Values:</p> <p>Y = Possible Resend</p> <p>N = Original Transmission</p>
98	EncryptMethod	int	Must be 0 (Always unencrypted)
102	CxlRejReason	int	<p>Code to identify reason for cancel rejection.</p> <p>The following valid values are supported by NYSE:</p> <p>Valid values:</p> <p>0 = Too Late To Cancel</p> <p>1 = Unknown order</p> <p>3 = Order is already in pending cancel or pending replace status</p> <p>97 = Firm Mnemonic Blocked</p> <p>98 = Clearing Firm Mnemonic Blocked</p>
103	OrdRejReason	int	<p>Code to identify reason for order rejection.</p> <p>The following valid values are supported by NYSE:</p> <p>Valid values:</p> <p>0 = Broker Option</p> <p>1 = Unknown Symbol</p> <p>2 = Exchange Closed</p> <p>3 = Order Exceeds Limit</p> <p>4 = Too Late To Enter</p> <p>5 = Unknown Order</p> <p>6 = Duplicate Order</p> <p>97 = Firm Mnemonic Blocked</p> <p>98 = Clearing Firm Mnemonic Blocked</p> <p>99 = Other (only for orders sent directly to a Broker's HandHeld)</p>
109	ClientID	String	Contains a Sender firm's Market Participant ID (MPID) in 4 byte alphanumeric format. Returned on acknowledgements, executions, and order drop copy messages from Broker Systems. Control characters not allowed.

Tag	Field	Format	Values
			<p>Required when designating an order with Self Trade Prevention (Tag 7928) to the Trading Engine.</p> <p>Returned on all order and cancel/replacement activities and drop copies.</p>
110	MinQty	Qty	<p>A Minimum Trade Size Quantity for orders with a Time in Force of "IOC"</p> <p>Value may be Zero.</p> <p>**For symbols migrated to Pillar - see section "NYSE Equities Order Types" for list of order types that support this attribute</p>
111	MaxFloor	Qty	<p>The minimum value for this tag is zero. If specifying a quantity other than zero, the value must be equal to one (1) times the securities unit of trade (i.e., 100 shares minimum for a 100-share UOT security, 10 shares minimum for a 10-share UOT security and 1 share minimum for a 1-share UOT security.</p> <p>NOTE: This tag is not valid for orders routed to Broker UTP</p> <p>**For symbols migrated to Pillar - Reserve order may only be entered with MaxFloor = a multiple of the symbol's round lot parameter. Mixed lots are rejected</p>
112	TestReqID	String	Identifier included in Test Request message to be returned in resulting Heartbeat
114	LocateReqd	Boolean	<p>Indicates whether the broker is to locate the stock in conjunction with a short sell order.</p> <p>Valid values:</p> <p>Y = Indicates the broker is responsible for locating the stock</p> <p>N = Indicates the broker is not required to locate</p>
115	OnBehalfOfCompID	String	Firm Mnemonic.
116	OnBehalfOfSubID	String	Trading partner SubID used when delivering messages via a third party.
122	OrigSendingTime	Time Stamp	<p>Original time of message transmission, always expressed in GMT (Greenwich Mean Time) when transmitting orders as the result of resend request.</p> <p>Required for message resends, If data is not available, set to same as SendingTime [52].</p>
123	GapFillFlag	Boolean	<p>Indicates that the Sequence Reset message is replacing administrative or application messages, which are not present.</p> <p>Valid values:</p> <p>Y = Gap Fill message, MsgSeqNum field valid</p> <p>N = Sequence Reset, ignore MsgSeqNum</p>
128	DeliverToCompID	String	<p>Assigned value used to identify the firm targeted to receive the message if the message is delivered by a third party i.e. the third party firm identifier would be delivered in the TargetCompID field and the ultimate receiver firm ID in this field.</p> <p>In outbound messages it will contain the Firm Mnemonic</p>
129	DeliverToSubID	String	Assigned value used to identify specific message recipient (i.e. trader) if the message is delivered by a third party
141	ResetSeqNumFlag	Boolean	<p>Indicates that both sides of the FIX session should reset sequence numbers.</p> <p>Valid Values:</p>

Tag	Field	Format	Values
			Y = Yes, reset sequence numbers N = No
142	SenderLocationID	String	Contains the value in tag 143 from the original order.
143	TargetLocationID	String	Trading partner LocationId (i.e. geographic location and/or desk, and/or the broker booth information, and/or broker badge number). Required for all orders, cancels, cancel replaces and cancel reduces routed to Broker UTP.
144	OnBehalfOfLocationID	String	Trading partner LocationId (i.e. geographic location and/or desk) used when delivering messages via a third party.
145	DeliverToLocationID	String	Trading partner LocationId (i.e. geographic location and/or desk) used when delivering messages via a third party.
150	ExecType	char	Describes the specific ExecutionRpt (i.e. Filled) while OrdStatus always identifies the current order status (i.e. Partially Filled) The following valid values are supported by NYSE: 0 = New 1 = Partially filled 2 = Filled 3 = Done for Day 4 = Canceled 5 = Replaced 6 = Pending Cancel 8 = Rejected E = Pending Replace
151	LeavesQty	Qty	Amount of shares open for further execution. If the OrdStatus is Canceled, DoneForDay, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty - LastShares.
207	SecurityExchange	Exchange	Market used to help identify a security. Valid values: N = NYSE CCG will route to appropriate executing market destination regardless of the value designated on incoming messages. CCG will return the actual handling market center on outgoing messages.
287	SellerDays	int	Specifies the number of days that may elapse before delivery of the security. This tag is required if tag 63=8. Valid Values are 2 thru 60.
337	ContraTrader	String	Identifies the trader of the ContraBroker. For UTP executions, will contain value of "0000". For Broker System executions, will contain the executing Broker Badge number.
371	RefTagID	int	The tag number of the FIX field being referenced.
372	RefMsgType	String	The MsgType of the FIX message being referenced.
373	SessionRejectReason	int	Code to identify reason for a session-level Reject message. Valid values: 0 = Invalid Tag Number 1 = Required Tag Missing 2 = Tag not defined for this message type 3 = Undefined Tag 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag

Tag	Field	Format	Values
			6 = Incorrect data format for value 7 = Decryption problem 8 = Signature problem 9 = CompID problem (SenderCompID, TargetCompID, or both) 10 = SendingTime accuracy problem 11 = Invalid MsgType
375	ContraBroker	String	Identifies contra broker. Execution Reports will contain 'ANON' in this field for NYSE executions. Away Market executions will always contain AHX. **For symbols migrated to Pillar – always set to 'ANON' regardless of whether the order executed on NYSE or was entered on NYSE, then routed and executed at an away market
377	SolicitedFlag	Boolean	The Solicited Flag is not used in CCG and is returned in subsequent messages.
382	NoContraBrokers	int	The number of ContraBroker entries.
434	CxlRejResponseTo	int	Identifies the type of request that a Cancel Reject is in response to.
437	ContraTradeQty	Qty	Quantity traded with the ContraBroker.
438	ContraTradeTime	String	Indicates the Execution time in hours, minutes and seconds (HHMMSS) from CBS (in production today). Executions from UTP will return only hours and minutes (HHMM). This is displayed in Eastern Standard Time (EST/EDT).
439	ClearingFirm	String	Firm that clears the trade. Used if different from the executing firm. **For symbols migrated to Pillar – tag not supported
440	ClearingAccount	String	Supplemental accounting information forwarded to clearing house/firm.

User Defined Fields supported by CCG

Tag	Field	Values
7928	SelfTradeType	<p>"N" – Cancel Newest (or arriving order) "O" – Cancel Oldest (or resting order)</p> <p>Available to all Order types. Note: Opening (OPG) orders, Market on Close (MOC) and Limit on Close (LOC) orders will not be validated for Self-Trade Prevention.</p>
9403	OffsetPrice	<p>Offset or minimum price improvement value from the current Bid or Offer.</p> <p>This tag is required if 9487=RPI</p> <p>Value must be zero, greater than or equal to the minimum offset value (\$0.0010) and must be in multiples of \$0.0010.</p>
9425	StatusResp	<p>Admin responses generated as a result of the Execution Report Correction (ERC) information:</p> <p>1 = Busted Trade 3 = Corrected Price 4 = Price is Correct 5 = Report CHG</p> <p>If StatusResp [9425] is present, Side [54] must appear representing the past tense of the order instruction.</p>
9421	MEOrderID	<p>Matching Engine Order ID – numeric value; assigned by ME to input order - unique value per symbol per day.</p> <p>Returned only if subscribed.</p>
9426	BillingRate	<p>Combines current values of Tags 9570 and 9578 into one tag and supports additional NYSE Billing Tier information:</p> <p>Field may contain an Away Market Indicator with optional MMID separated by "/". Example format = D/EDGA.</p> <p>Or</p> <p>Field may contain Billing Indicator with optional billing tier separated by a "/" : Example format = 2/2 (represents a report for less than 2000 shares that provided liquidity) Example format = 2/3 (represents a report for less than 5000 shares but greater than 1999 shares that provided liquidity)</p> <p>Supports 2 byte MPL billing indicator values:</p> <p>1 = Taker 2 = Provider 3 = Blended 4 = Market on Close and Market Orders Executed in Close 5 = Opening/Provider 6 = Closing/Provider customer execution, or dQuote executed in Close if received between 3:35 – 3:57 pm* 7 = Limit on Close 8 = Retail Order Provider 9 = Retail Order Taker 10 = RLP - Retail Taker MPL **For symbols migrated to Pillar – not supported 11 = Taker MPL 12 = Provider MPL 13 = RET – Retail Firm Provider 14 = RET – Retail Firm MPL Taker 15 = Closing Offset 16 = Closing early D-Quote (received prior to 3:35 PM)*</p>

Tag	Field	Values
		<p>17 = Closing late D-Quote (received after 3:57 pm)*</p> <p>18 = Participated in NYSE Floor Broker Cross execution</p> <p>*For days on which the market closes early, these times will be adjusted accordingly (between 25 and three minutes before the close; 25 minutes before the close; three minutes before the close).</p>
9428	CxlQty	Required when NewOrdQty specified, Tag <9429>. **For symbols migrated to Pillar – not supported; instead use Cancel/Replace to reduce quantity and maintain ranking on the book
9429	NewOrdQty	If present, set to the new quantity to take effect (includes the open and executed amount). **For symbols migrated to Pillar – not supported; instead use Cancel/Replace to reduce quantity and maintain ranking on the book
9430	AutoExInd	<p>Valid Value = NX </p> <p>Routing Code returned on the Execution Report. If present, indicates the trade was executed automatically.</p>
9432	MiscDataLine4	Indicates DMMs/Broker's number. For any firm that routes orders to Broker UTP, the firm's internal information (for example, firm clearing number or Broker Badge number) is reported, if it conforms to the format.
9433	ExecutionInformation	Indicates DMMs/Broker's Give-up number. For any firm that routes orders to Broker UTP, this value is reported.
9436	MemoAB	<p>10 character text field; a period is returned for any character not entered</p> <p>Relative to NYSE Rule 108(a) where brokers permit DMMs who are establishing or increasing positions in their specialty securities to be on parity with the trading crowd, Tag 9436 is used to indicate Parity/ No Parity.</p> <p>Tag 9436 is also used to indicate whether a Report was part of a Cross transaction.</p> <p>Examples:</p> <p>Memo A (First 4 characters of Tag 9436) may contain</p> <p>Verbal ID or Sponsoring Badge or memo.</p> <p>Memo B (characters 5 through 10 of Tag 9436)</p> <p>NP.... No Parity</p> <p>NPCROS No Parity/Cross</p> <p>NPB... No Parity/Bill</p> <p>NPNB.. No Parity/ No Bill</p> <p>NPXP.. No Parity/Principal Cross</p> <p>NPXA.. No Parity/Agent Cross</p> <p>P..... Parity</p> <p>P.B... Parity/Bill</p> <p>P.NB.. Parity/ No Bill</p> <p>P.CROS Parity/ Cross</p> <p>P.XP.. Parity/Principal Cross</p> <p>P.XA.. Parity/ Agent Cross</p> <p>Unused characters at the end of the tag may be used for a memo.</p>
9440	ERReferenceNumber	<p>Format:</p> <p>RRRRRSSSSSSent in Execution Reports for orders sent to Broker UTP.</p>

Tag	Field	Values
9460	OrderCapacity2	<p>Additional value representing accounting type.</p> <p>Valid Values: Q = Indicates that an error was made in the execution of a previous order (for example, wrong stock or wrong side of the market, etc.) or on missing the market on a held order.</p> <p>Note: If using Tag 9460, Tag 47 cannot also be present. Tag 9460 cannot be used if Tag 47 is present.</p>
9461	AddQty	The additional quantity to be added to the order. Required for "MAKES" "ADD" Only booth-routed order quantity may be updated.
9483	DBExecId	<p>Associates all buy and sell execution reports and tape prints in the Display Book trade.</p> <p>6 Numeric Characters</p> <p>**For symbols migrated to Pillar – numeric string of up to 10 char; populated with the Pillar TradeID (unbundled, unique identifier provided to both sides of the trade).</p>
9487	RoutingInstruction	<p>ISO = Inter-Market Sweep DNS = Do Not Ship SOC = NMS IOC CO = Closing Offset Order **For symbols migrated to Pillar – available for Tape A securities only RPI = Retail Price Improvement Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update RTO = Retail Only Order **For symbols migrated to Pillar – available beginning on a date announced via Trader Update as Limit only; Market not supported RTNR = Retail Non-Routable Order **For symbols migrated to Pillar – not supported RTR = Retail Routable Order **For symbols migrated to Pillar – not supported ALO = Add Liquidity Only ISO ALO – Add Liquidity Only Inter-Market Sweep</p> <p>Note: This tag is instead of tag <57>. When using this tag, tag <57> cannot also be present.</p>
9570	ExecAwayMktId	<p>Contains The Market Center ID (see valid values below) and, optionally, the Market Maker ID separated by a slash (e.g., D/EDGA). If this tag is present, Tag 9578 will not be present.</p> <p>A = NYSE American B = Nasdaq BX C = National Stock Exchange D = FINRA ADF F = Algo order executed at NYSE Group G = Algo order executed Away H = MIAX I = International Securities Exchange J = Direct Edge A (EDGA) K = Direct Edge X (EDGX) L = LTSE M = Chicago Stock Exchange N = New York Stock Exchange P = NYSE Arca Exchange T = Nasdaq U = MEMX V = Investors' Exchange (IEX) W = Chicago Board Options Exchange X = Nasdaq PSX</p>

Tag	Field	Values
		Y = BATS Y Z = BATS Exchange
9578	BillingIndicator	<p>Execution Report Billing Indicators. If this tag is present, Tag 9570 will not be present.</p> <p>Valid Values: 1 = Taker 2 = Provider 3 = Blended 4 = Market on Close and Market Orders Executed in Close 5 = Opening/Provider 6 = Closing/Provider customer execution, or dQuote executed in Close if received between 3:35 – 3:57 pm* 7 = Limit on Close 8 = RLP - Retail Order Provider 9 = RLP - Retail Order Taker</p> <p>*For days on which the market closes early, this time will be adjusted accordingly (between 25 and three minutes before the close).</p>
9568	MinimumTriggerVol (MTV)	<p>Minimum Trigger Quantity for resting MPL order. Must be equal to or less than order quantity. Zero is considered a valid value.</p> <p>**For symbols migrated to Pillar - see section “NYSE Equities Order Types” for list of order types that support this attribute</p>
9579	ExpERCReferenceNumber	<p>Format: RRRRRSSSSS</p> <p>*Will contain the expanded activity id embedded in the ExecId <17> tag. This tag will be present on execution reports, report changes and admin responses.</p>
9704	PrevExpERCReferenceNumber	<p>Format: RRRRRSSSSS</p> <p>*Will contain the expanded activity id embedded in the ExecRefId <19> tag. This tag will be present on execution report corrections and admin responses.</p>

Appendix B: OrderCapacity

Tag	Field	Values		
47	OrderCapacity	Represents the Account Type, which reflects the type of trade as well as the relationship between the beneficial owner of the account and the member organization clearing the trade.		
		Valid Values:		
		A	=	Trading by a member or member organization acting as agent on behalf of an unaffiliated customer.
		P	=	Trading for the proprietary account of a member or member organization or an affiliate of a member or member organization.
		Q	=	Trading by a member on the Floor relating to the covering or liquidating a member's own error. All trades to establish or liquidate error positions in the member's error account must be identified with this account type.
		R	=	Trading by a member or member organization as principal that is intended to satisfy an originating customer order to buy or sell a security at the same price as the principal execution.

Appendix C: Bulk Action Processing Codes

Following table lists the allowed codes in tag 37 (OrderID) and the corresponding action and cancel scope for the Bulk Cancel / Block / Unblock message. Applies only in the Cancel Message (MsgType = F).

Bulk Cancel Action	Cancel Scope	Request Type	Tag37 (OrderID) value
Cancel	Cancel All <u>excluding</u> Closing Orders (MOC, LOC, and CO)	Applies to the Orders sent through the connection in which the Bulk Cancel message is received only.	-999
Cancel	Cancel All (excluding Opening and Closing Orders (MOC, LOC, CO).	All Connections	-799
Cancel	Cancel Opening and/or Closing Orders only (OPG, MOC/LOC and CO)	All Connections	-766
Cancel	Cancel Day Orders Only excluding Closing Orders.	All Connections	-788
Cancel & Block	Cancel and Block all Orders excluding Opening and Closing Orders.	All Connections	-899
Block	All Incoming	All Connections	-700
UnBlock	All Incoming	All Connections	-600

Appendix D: NYSE Pillar Reason Codes

New Reason Codes Returned as Text on Outgoing Messages

Pillar will return a new set of event reason codes and descriptions as text on Execution Reports and Cancel Reject messages. These codes qualify the event that produced the message.

Format: Text = 'Rxxx: Description'

<u>Reason Code</u>	<u>Description</u>	<u>Reason Code</u>	<u>Description</u>
R000	OK	R022	Invalid TimeInForce
R001	Invalid SenderCompID	R023	Invalid Settlement Type
R002	Invalid SenderSubID	R024	Invalid FutSettDate
R003	Invalid SendingTime	R025	Invalid SymbolSfx
R004	Invalid TargetCompID	R026	Invalid Open/Close
R005	Invalid TargetSubID	R027	Invalid StopPx
R006	Invalid OnBehalfOfCompID	R028	Invalid Client ID
R007	Invalid OnBehalfOfSubID	R029	Invalid MinQty
R008	Invalid DeliverToCompID	R030	Invalid MaxFloor
R009	Invalid DeliverToSubID	R031	Invalid LocateReqd
R010	Invalid Account	R032	Invalid ExpireTime
R011	Invalid ClOrdID	R033	Invalid SecurityType
R012	Invalid ExecInst	R034	Invalid MaturityMonthYear
R013	Invalid IDSource	R035	Invalid PutOrCall
R014	Invalid OrderQty	R036	Invalid StrikePrice
R015	Invalid OrdType	R037	Invalid Covered/Uncovered
R016	Invalid Price	R038	Invalid Customer/Firm/Broker/MM
R017	Invalid Order Capacity	R039	Invalid MaturityDay
R018	Invalid Security ID	R040	Invalid PegDifference
R019	Invalid Side	R041	Invalid SellersDays
R020	Invalid Symbol	R042	Invalid TradingSessionID
R021	Invalid Text	R043	Invalid NoTradingSessions

Reason Code	Description	Reason Code	Description
R044	Invalid DiscretionInst	R077	System full (MENG_RATE_EXCEEDED)
R045	Invalid DiscretionOffset	R078	Throttle Reject
R046	Invalid PriceType	R079	Symbol Halted
R047	Invalid ClearingFirm	R080	No symbol permission
R048	Invalid ClearingAccount	R081	Price Too Far Outside
R049	Invalid PartyID	R082	MWCB Halt
R050	Invalid Optional Data	R083	Market Closed
R051	Invalid CrossID	R084	Symbol Closed
R052	Invalid StrategyIndicator	R085	LULD Cancel Instruction
R053	Invalid TradeID	R086	No Price Slide Inst During SSR
R054	Invalid NoSelfTrade	R087	Invalid StockLegGiveUp
R055	Invalid CAPStrategy	R088	Invalid NoLegs
R056	Invalid SpecialOrdType	R089	Invalid LegPositionEffect
R057	Invalid RoutingInst	R090	Invalid LegSymbol
R058	Invalid OffsetPrice	R091	Invalid LegCFIcode
R059	Invalid ExtendedExecInst	R092	Invalid LegMaturityDate
R060	Invalid IntroducingBadgelD	R093	Invalid LegStrikePrice
R061	Invalid BillTo	R094	Invalid LegContractMultiplier
R062	Invalid ParentFirmClOrdID	R095	Invalid LegRatioQty
R063	Invalid ParentFirmExchangeOrdID	R096	Invalid LegSide
R064	Invalid ParentFirm	R097	Invalid LegRefID
R065	Invalid InterestType	R098	Unsupported Order Type
R066	Invalid DisplayInd	R099	UROUT
R067	Invalid PegInd	R100	Primary Market Not Available
R068	Invalid CeilingFloorPrice	R101	No NBBO/PBBO for Peg
R069	Invalid MinPegQty	R102	No Market for Market Order
R070	Invalid DOrderAuctionPrice	R103	Marketable Price
R071	Invalid DiscMaxVol	R104	Done for Day
R072	Invalid DicsRouteInd	R105	Credit Limit Violation
R073	Invalid MinimumTriggerVol (MTV)	R106	Cancel Remaining IOC
R074	Invalid Attributed Quote	R107	Too Late to Cancel
R075	Invalid Proactive If Locked	R108	InvalidPossResend
R076	System not available	R109	Cancel Pending

Reason Code	Description	Reason Code	Description
R110	Symbol already opened	R141	Invld Inst During Imbalance Freeze
R111	Firm Bulk Cancel	R142	Invld Inst After Cutoff Time
R112	OnBehalfOfCompID Blocked	R143	Cancelled by Primary Market
R113	ClearingFirm Blocked	R144	Pending - Imbalance Freeze
R114	Cancel/Replace Pending	R145	No RLP Permission
R115	Modify Pending	R146	Invalid Instruction for IOC's
R116	Cannot Flip Imbalance	R147	System full (CG_RATE_EXCEEDED)
R117	Cannot Increase Imbalance	R148	Pending Cancel - Auction Running
R118	Pending Cancel - Imbalance Freeze	R149	Pending Modify - Auction Running
R119	Pending Replace - Imbalance Freeze	R150	Pending Replace - Auction Running
R120	Pending Modify - Imbalance Freeze	R151	Invld Inst for Pending Order
R121	Pending Cancel - Routed Interest	R152	SSH Price below NBB on ISO
R122	Pending Replace - Routed Interest	R153	IOC Received while Auction Running
R123	Pending Modify - Routed Interest	R154	Pending - Symbol Transition
R124	Pending - Auction Running	R155	Pending Cancel - Symbol Transition
R125	Duplicative Order Check	R156	Pending Modify - Symbol Transition
R126	Cancelled by Exchange	R157	Pending Replace - Symbol Transition
R127	New Order	R158	Invalid For Tick Pilot
R128	Fill	<i>(R159 – R167 not applicable to this gateway)</i>	
R129	Partial Fill	R168	Pillar Risk Mitigation
R130	Reduced	R169	No Last Sale for Peg
R131	Replaced	R170	Symbol Pending Closing Auction
R132	No Market for Cross	R171	Extreme Closing Order Imbalance
R133	STP Cancel*	R172	Invalid Multi-Message
R134	Invalid PossDupe	R173	Invalid Request Targeting Manual SenderCompID
R135	TPID Blocked	R174	Invalid DMMRejectReason
R136	Invalid Bulk Cancel	R175	Pending - Pending Auction State
R137	Pending Bulk Cancel	R176	Pending Cancel – Pending Auction State
R138	Symbol Not Open	R177	Pending Modify – Pending Auction State
R139	Symbol Suspended	R178	Pending Replace – Pending Auction State
R140	Symbol IPO Halt	R179	Cancelled - DMM Manual Order Re-price

*Format for STP Cancel is 'Text' field = 'R133:STP...' where ... = the ClOrdID of the contra-side order that caused the cancellation.

Reason Code	Description	Reason Code	Description
R180	Too early to open	R208	Invalid ManualActionID
R181	Too early to close	R209	Invalid AuctionSellIndicator
R182	Symbol not frozen by Auction Request	R210	Invalid IntradaySellShortQty
R183	Symbol is frozen by DBK GUI	R211	Indication Template is Open
R184	Too Late - Auction Running	R212	Invalid Action
R185	Too Late - Symbol Transition	R213	Invalid SellIndicator
R186	No Eligible Crossing Interest	R214	Invalid IntradaySellShortQty
R187	Book is locked/crossed	R215	Invalid ManualResponseType
R188	No interest exists	R216	No NYSE last sale
R189	Imbalance too large	R217	Symbol Direct Listing State
R190	SSH price below SSR filing price	R218	DMM GUI Reduction in Manual Order Qty
R191	Symbol already closed	R219	Cross Eligible
R192	Opening template opened	(R220 - R222 not applicable to this gateway)	
R193	Closing template opened	R223	Risk - Single Ord Max Qty
R194	PRIN entered on auction template	R224	Risk - Single Ord Max Notional
R195	Mandatory Indication submitted	R225	Risk - Gross Credit Breach
R196	Pending Crowd exists	R226	Risk - Kill Switch
R197	No consolidated last sale	R900	Invalid ProactiveDiscretionInd
R198	Paired qty exceeds max trade parameter	R901	Invalid ExtendedPNP
R199	LULD or MWCB timer running	R902	Invalid ExecBroker
R200	Locking/Crossing Away Quote	R903	FastCancelRep Unsupported
R201	Cross Not Eligible	R904	Pending Cancel
R202	Too late to open	R905	Pending Replace
R203	Pending Acceptance (for Ack on order arrival)	R906	System full (CGA_RATE_EXCEEDED)
R204	Rejected Cancel by DMM	R999	Unknown Issue Encountered
R205	Cancelled by DMM		
R206	Price is outside allowable range		
R207	Auction Validation In Progress		
R208	Invalid ManualActionID		