

MRX REPLATFORM:

Frequently Asked Questions February 2022

Overview

Q: What is the MRX Replatform?

- MRX is being replatformed in order to update the underlying hardware and harmonize exchange technology. Additionally, the Replatform project aims to introduce conformity of APIs, Data Feeds, and functionality across Nasdaq US Options markets.

Q: Are other Nasdaq options exchanges impacted by the Replatform?

- BX Options has completed its migration to the harmonized platform in September 2020. MRX is currently planned for a November 2022 launch, with GEMX and ISE tentatively planned to follow in 2023.

Q: When will MRX migrate to the new platform?

- MRX will make the new platform Test Facility available to members with full functionality in May 2022. MRX intends to migrate to the new platform in production in November 2022. Detailed symbol migration and connectivity details will be provided in future updates

Functionality

Q: Will MRX functionality change?

- Yes, pending SEC Approval, MRX will introduce new features, adjust some existing functional behaviors to align with other Nasdaq Options venues, and decommission underutilized features. More details can be found below.

Q: Which MRX functionality change, and how?

- **PIM Response modification:** Today on MRX, a response to a Price Improvement auction cannot be cancelled and can only be modified to improve the response price or quantity in favor of the agency side of the auction. As symbols migrate the new MRX platform, participants will be able to cancel and modify PIM responses without restriction for both simple and complex PIM responses. This change is being made in an effort to harmonize the PIM auction functionality with BX PRISM.
- **PIM early termination handling:** Today on MRX, unrelated marketable interest that arrives in the same options series as a running price improvement auction, will lead to an early termination of the auction with the unrelated interest participating with the auction as it executes/allocates to the extent possible. As symbols migrate to the new MRX platform, unrelated interest will no longer early terminate running price improvement auctions and instead will interact with the MRX book and rest, if possible, to be allocated if marketable against the PIM upon its natural conclusion. This change is being made in an effort to harmonize the PIM auction functionality with BX PRISM.

- **PIM halt treatment:** Today on MRX, a running PIM auction will be early terminated without execution if a halt is initiated during the auction timer. As symbols migrate to the new MRX platform, PIMs will be early terminated with execution with the contra side only. This change is being made in an effort to harmonize the PIM auction functionality with BX PRISM.
- **Flash Auctions:** MRX will replace Flash auction functionality with a BX/PHLX like exposure order notification process. Orders that lock or cross the ABBO will continue to be exposed in an exposure notification, but the allocation methodology will adjust from a customer priority pro-rata allocation at the conclusion of the auction, to a first come first allocated approach, as taken on PHLX and BX today. This will also lead to new liquidity codes being introduced to support that included in a table below for reference. This change is being made in an effort to harmonize technology with the BX replatform.

55	Simple Exposure Order Initiator- Upon Receipt
56	Simple Exposure Order Initiator - Subsequent
57	Simple Exposure Order - Responder

- **Stock Tied Routing:** MRX will temporarily de-activate stock tied combination book matching and will look to re-introduce as a day 2 functionality. As symbols migrate to the new platform, stock tied GTCs orders will be cancelled, and any incoming Stock tied orders for migrated symbols will be rejected.
- **Qualified Contingent Crosses:** MRX will temporarily de-activate stock tied qualified contingent cross functionality and will look to re-introduce as a day 2 functionality. As symbols migrate to the new platform, QCC stock tied orders will be rejected.
- **Simple Order Routing and repricing:** MRX will introduce BX like routing strategies that include SRCH, FIND, POST and DNR as well as continuous repricing. Additionally, IOC orders will no longer be routable on MRX. FIX will introduce RoutingStrategy (847) as a new tag to support the ability to provide routing strategies (including ALO/Post Only) on an order-by-order basis:
 - **SRCH** - try available market centers then post to the book - and continue to proactively route out if due at an away exchange.
 - **FIND** - try available market centers up to the limit price of the order then post to NASDAQ - will not attempt routing again until the next opening (or re-opening from a halt) process.
 - **POST** - (Post Only/ALO) reprice or cancel the order, depending on firm level instructions provided to market operations, when the order arrives locked or crossed with the local book.
 - **DNR** - (Do Not Route) send the order directly to NASDAQ and never route away.
- **Limit Order Price Protection:** MRX will introduce BX and NOM limit order price protection that will reject orders that arrive priced through the National Best Bid or Offer by the greater of a configurable percentage or absolute dollar amount
- **Acceptable Trade Range Protection:** MRX will introduce BX, NOM and PHLX style acceptable trade range protection that introduces a brief pause of an order that reached its ATR limit to allow liquidity to arrive before canceling

Q: What MRX functionality will be decommissioned?

- **ISO Day/GTC Orders:** With the Replatform, MRX will no longer support non-IOC ISO orders; any ISO orders submitted with a TIF other than IOC will be rejected. For symbols that haven't migrated to the new MRX platform, Day and GTC ISO orders will continue to be accepted rest on the book if they are not marketable upon arrival.
- **Do Not Flash:** With the replatform, MRX will no longer support the Do Not Flash instruction that FIX previously supported in AuctionInst (8601) in the *New Order Single* Message. AuctionInst (8601) will be deprecated from the MRX FIX specification provided with the replatform. *FlashInst* will no longer be supported on the MRX OTTO spec and will be replaced with *Reserved* and blank space will be required
- **Sweep Orders:** With the replatform, MRX will no longer support Sweep Orders over FIX. As symbols migrate to the new

platform, attempts to submit Sweep Orders will be rejected.

- **Order Persistence:** MRX will no longer support persistence and will not require this demarcation for GTC orders. This functionality is legacy to pre-Nasdaq operation of MRX and is not necessary for port or order book resiliency on the Nasdaq infrastructure.
- **External Tradeinfo:** MRX will no longer support external Tradeinfo available for customers. Participants should access information available on ReportHQ or contact Market Operations for any additional information required.
- **External Killswitch GUI:** MRX will no longer support external Killswitch GUI access for participants. Participants wishing to request a Killswitch can leverage FIX, OTTO or SQF or call Market Operations for purge support.

Q: Will the allocation methodologies change for MRX ?

- No, MRX will continue to operate with the same allocation methodologies that exist on MRX today.
 - **Simple Order Book:** Customer Priority, Pro-rata – Customers are allocated in price-time followed by Lead Market Maker enhanced allocation (where applicable), followed by all others in Size Pro-rata.
 - **Complex Order Book:** MRX will continue to support the capability for both of the below allocation methodologies on the complex book, but currently and after the migration, all symbols will remain assigned to the price-time allocation methodology
 - Price-Time – orders are allocated in price time with no customer priority
 - Customer Priority, Pro-rata – Customers are allocated in price-time followed by Lead Market Maker enhanced allocation (where applicable), followed by all others in Size Pro-rata.

Q: Is Nasdaq changing the market structure or fees for MRX ?

- At this time, Nasdaq is not changing the market structure and fees beyond the recent fee introduction. See [DTN](#) and [OTA](#) for details

Interfaces/Protocols

Q: What is the impact to the Specialized Quote Feed (SQF) offered on MRX?

- MRX will introduce support for [SQF 8.2d](#) with no specification changes (compared to current [SQF 8.2b](#)) other than to introduce new liquidity indicators, which will not be provided until symbols and participants migrate to the new platform
- MRX SQF 8.2d will introduce support for Post Only quoting, with reprice or cancel configurations available upon request via Market operations. Post only quoting will only be available for symbols that have migrated to the new platform via SQF 8.2d
- MRX SQF 8.2d will eliminate support for message types that exclude "SentTimeStamp". SentTimeStamp will be a required field on SQF 8.2d. See below for a list of eliminated message types that will no longer be supported as symbols and participants migrate to SQF 8.2d:
 - "QQ" = Simple Quote Block (Results in a Regular Reply) excluding "SentTimeStamp"
 - "Qq" = Simple Quote Block (Results in a Detailed Reply) excluding "SentTimeStamp"
 - "QL" = Simple Quote Block (Results in a Regular Reply) excluding "SentTimeStamp"
 - "Ql" = Simple Quote Block (Results in a Detailed Reply) excluding "SentTimeStamp"
 - "QC" = Complex Quote Block (Results in a Regular Reply) excluding "SentTimeStamp"
 - "Qc" = Complex Quote Block (Results in a Detailed Reply) excluding "SentTimeStamp"
 - "QR" = Quote Block Reply Message excluding "SentTimeStamp"
 - "Qr" = Detailed Quote Reply Message excluding "SentTimeStamp"
 - "PU" = Underlying Purge Message excluding "SentTimeStamp"
 - "PR" = Underlying Purge Reply Message excluding "SentTimeStamp"

- Participants will be required to obtain new Ports/IPs for SQF v8.2d and symbols will be available for quoting on this version of SQF as they migrate to the new platform. Conformance will be required.
- Participants will be required to maintain the INET connection to SQF v8.2b for quoting symbols until they migrate to the new platform, but the exchange will not charge for the duplicate ports during the migration month.

Q: What is the impact to MRX OTTO protocol?

- MRX will introduce support for [OTTO v2.1.5](#) and users **will be required** to obtain new Ports/IPs.
- Conformance **will be required** of OTTO v2.1.5 users and access to production OTTO ports on the new platform will be dependent on it.
- MRX OTTO v2.1.5 will have no specification adjustments, but one minor field allowable enumeration adjustment in the *New Order* Message
 - *FlashInst* will no longer be supported and will be replaced with *Reserved* and blank space will be required
- MRX OTTO v2.1.5 will truncate *ClearingAccount* to 3 characters in line with OCC updated requirements, but continue to accept 4 characters in this field
- MRX OTTO v2.1.5 will introduce new liquidity indicators
- OTTO participants will have to maintain dual connectivity to legacy OTTO 2.1.4 and OTTO 2.1.5. OTTO 2.1.5 will be required as symbols migrate to the new platform, but the exchange will not charge for the duplicate ports during the migration month.

Q: What is the impact to MRX FIX protocol?

- MRX will introduce support for [FIX v13.0](#) and users **will be required** to obtain new Ports/IPs.
- Conformance **will be required** of FIX v13.0 users and access to new functionalities will be contingent on a successful conformance.
- MRX FIX v13.0 will have adjustments in an attempt to harmonize across the Nasdaq U.S. Options. Below are the detailed message/tag changes that will be available to MRX FIX 13.0 users as symbols migrate to the new platform:
 - *ExecInst* (18) will no longer support Add Liquidity only (ALO) Orders with “1” for “ALO, reprice” and “6” for “ALO cancel. Instead, participants will leverage *RoutingStrategy* (847) and the enumeration “POST” to submit an ALO order. Firms can provide a firm mnemonic specific configuration to market operations that will control whether ALO orders reprice or cancel.
 - *ExecInst* (18) will no longer support Do Not Route (DNR) Orders with “h” for DNR orders. Instead, participants will leverage *RoutingStrategy* (847) and the enumeration “DNR” to submit a DNR order.
 - *HandInst* (21) will be deprecated and no longer supported in any messages on MRX FIX 13.0.
 - *SecurityType* (167) will be deprecated from all incoming FIX messages on MRX FIX 13.0. *ExecutionReport* and other outgoing FIX messages will continue to support this tag for informational purposes.
 - *MaturityMonthYear* (200) will be deprecated from all FIX message on MRX FIX 13.0. *MaturityDate* (541) will replace the need for this tag and be available on all relevant messages.
 - *MaturityDay* (205) will be deprecated from all FIX message on MRX FIX 13.0. *MaturityDate* (541) will replace the need for this tag and be available on all relevant messages.
 - *CustomerOrFirm* (204) will have enumerations adjusted to be harmonized with BX. Below are the current MRX enumerations for each CustomerOrFirm participant type mapped to the new enumerations that will be available to FIX participants upon migration to MRX FIX 13.0
 - Current → Replatform
 - Customer “0” → Customer “0”
 - Proprietary Firm “1” → Firm “1”
 - Broker Dealer – Firm “2” → **will be deprecated but will map to Firm “1” during the symbol migration from INET ports for symbols that have migrated to the new platform**

- Broker Dealer – Customer “3” → **will be deprecated but will map to Broker Dealer “2” during the symbol migration from INET ports for symbols that have migrated to the new platform**
- MRX Registered Market Maker “4” → MRX Registered Market Maker “5”
- Other exchange Registered MM “5” → Other exchange registered MM “4”
- Proprietary Customer “7” → **will be deprecated but will map to Professional Customer (8) during the symbol migration from INET ports for symbols that have migrated to the new platform**
- Professional Customer “8” → Professional Customer “8”
- Joint Back Office Firm “9” → Joint Back Office Firm “7”
 - Currently not supported and will not be supported on replatform
- **SecurityExchange** (207) will continue to be supported with adjusted enumerations to harmonize with industry standards and provide support. Currently MRX supports MCRY as a valid enumeration in new order single. Upon replatform below are the valid values:
 - 1 = AMEX
 - Z = BATS
 - B = BSE
 - C = C2
 - W = CBOE
 - Y = ISE
 - X = PHLX
 - N = NYSE
 - Q = NASDAQ
 - T = BX Options
 - 7 = MIAX
 - H = ISE GEMINI
 - E = BATS EDGX
 - J = ISE MERCURY
 - P = MIAX PEARL
 - D = MIAX Emerald
 - If not provided will default to the local exchange
- **ClearingAccount** (440) will send all 4 characters to the OCC. Additionally, ClearingAccount will be a required field when *CustomerOrFirm* = 4 (Away Market Maker); port defaults can be set up, but absence of this field for an Away market maker will lead to a reject
- **ExecutingParticipantID** (7901) will be deprecated from all FIX messages and replaced with *AllocAccount* (79), which will be used to convey preferencing instructions. Additionally, MRX FIX 13.0 will no longer require the “PR” suffix in front of the IFI when communicating the preferred Market Maker in *AllocAccount* (79).
- **AuctionInst** (8601) will be deprecated from all FIX messages on MRX FIX 13.0 with the “Do not Flash” function no longer being supported
- **SpecialOrdType** (9202) will no longer be supported for the initiation of Block Auctions leveraging enumeration “B”. Instead Block Auctions will leverage *AuctionType* (9373) with enumeration equal to “B” for Block Auction. Note *SpecialOrdType* (9202) will still support Complex Exposure auction initiation in New Order Multileg.
- **RFPID** (9210) will be introduced as non-required field to the *New Order Single* message to support Request for PRISM/ PIM (RFP) initiator functionality to control ability cancel or attempt resting on book after failed RFP initiation attempt. Please note, MRX will not support RFP functionality at this time on MRX FIX 13.0 at this time and any message with this

tag present will lead to a reject.

- **RFPInstr** (9211) will be introduced as non-required field to the *New Order Single* message to support Request for PRISM/PIM (RFP) functionality. Please note, MRX will not support RFP functionality at this time on MRX FIX 13.0 at this time and any message with this tag present will lead to a reject.
- **AuctionID** (9370) will be introduced as non-required field to support future possibility of Auction response via the *New Order Single* message. Please note, MRX will not support auction responses on MRX FIX 13.0 at this time.
- **AuctionType** (9373) will be introduced to the New Order Single message to support Block Auction initiation as previously mentioned.
- **AuctionType** (9373) will be introduced to New Order Cross message to replace CrossType (549) in support of the different auction enumerations
- **BranchSeqNbr** (9861) will be deprecated from all FIX messages on MRX FIX 13.0 with this no longer being supported as symbols migrate to the new platform
- **Liquidity Indicator** (9730) will no longer provided Alpha based enumerations for the following liquidity codes and instead will adjust to numeric IDs to match the remainder of the liquidity code set.
 - Undefined: X → 0
 - Maker: M → 1
 - Taker: T → 2
 - Response: R → 4
 - Hidden: H → 5
 - Opening: O → 6
 - Cross: C → 7
- **Liquidity Indicator** (9730) will provide the following new liquidity codes where applicable
 - 53= Combo Taker Against Regular – Thru NBBO
 - 54= Combo Taker Against IO – Thru NBBO
 - 55= Simple Exposure Order – Upon Receipt
 - 56= Simple Exposure Order – Subsequent
 - 57 Simple Exposure Order – Responder
- **Solicitation Auctions:** will require TimeInForce (59) of FOK and no longer support ExecInst (18) = G for AON + IOC instructions for symbols that have migrated to the new platform
- The migration will provide FIX participants with the capability to remain on the legacy version of the [MRX FIX v12.1.12 specification](#) during the symbol migration, including for symbols that have migrated. Participants that choose to remain on the legacy version of the spec will have limited access to functionality as symbols migrate to the new MRX platform.
- FIX participants must cancel GTC orders prior to migrating from the legacy version to the replatformed version of the FIX v13.0 spec. Participants can coordinate this activity with Market Operations.
- Below are FIX functionality nuances that will not be supported in full for FIX participants until they migrate to FIX v13.0
 - **ExecInst** (18) will support DNR order entry using enumeration “h” and ALO order entry using enumerations “1” or “6” from legacy INET ports for symbols that have migrated to the new platform translating to DNR and POST respectively
 - Participants will be required to have a new firm level reprice or cancel configuration in place in order to leverage ALO orders for symbols that have migrated to the new platform (regardless of the FIX spec version the participant is on)
- **RoutingStrategy** (847) will not be available to participants on the legacy MRX FIX specification and therefore SRCH and FIND enumerations will not be available to participants. Any order not submitted from a legacy FIX port for a migrated symbol as DNR via ExecInst (18) “h” or ALO via *ExecInst* (18) “1” or “6” will be translated to a FIND order

- **SecurityExchange** (207) will be ignored from legacy FIX ports and default to “J” for MRX
- **Member Kill Switch** requests will be supported during the migration and will be extended across all underlyings, regardless of if they have been migrated to the new platform or not, including Killswitch purges triggered by Market Wide Risk Protection or Notional Value Risk protection
- **ExposureFlag** (9203) Block auction use of the attributable enumerations in this field will only be available for participants who migrate to the new MRX FIX v13.0 specification with the replatform
- **Liquidity Indicator** (9730) will not provide new liquidity codes mentioned above for legacy FIX ports. Below is the backward translation that will take place for migrated symbols and legacy FIX ports:
 - 53= Combo Taker Against Regular – Thru NBBO → 18 Combo Taker Against Regular
 - 54= Combo Taker Against IO – Thru NBBO → 20=Combo Taker Against IO
 - 55= Simple Exposure Order – Upon Receipt → 8=Flashed Order
 - 56= Simple Exposure Order – Subsequent → 9=Flash Response
 - 57 Simplex Exposure Order – Responder → 9=Flash Response
- **AuctionType** (9373) Block auctions will leverage this tag for initiation on New Order Single on the replatform version of the FIX spec. Participants can leverage tag *SpecialOrdType* (9202) to initiate Block Auctions from legacy FIX ports for symbols that have migrated.

Q: What is the impact to MRX FIX Drop?

- MRX will introduce **FIX Drop 2.0** specification with minor changes compared to currently supported FIX Drop 1.1.3 on MRX noted below. Additional details are available in the updated technical specifications.
 - **AuctionInst** (8601) will be deprecated from all FIX messages on MRX FIX Drop v2.0 with the “Do not Flash” function no longer being supported
 - **MaturityMonthYear** (200) will be deprecated from all FIX message on MRX FIX Drop v2.0 **MaturityDate** (541) will replace the need for this tag and be available on all relevant messages.
 - **MaturityDay** (205) will be deprecated from all FIX message on MRX FIX Drop v2.0.
 - **MaturityDate** (541) will replace the need for this tag and be available on all relevant messages.
 - **CustomerOrFirm** (204) will have enumerations adjusted to be harmonized with BX. Below are the current MRX enumerations for each CustomerOrFirm participant type mapped the new enumerations that will be available to FIX participants upon migration to MRX FIX v2.0
 - Current → Replatform
 - Customer “0” → Customer “0”
 - Proprietary Firm “1” → Firm “2”
 - Broker Dealer – Firm “2” → Firm “2”
 - Broker Dealer – Customer “3” → Broker Dealer “B”
 - MRX Registered Market Maker “5” → MRX Registered Market Maker “M”
 - Other exchange Registered MM “6” → Other exchange registered MM “O”
 - Proprietary Customer “7” → Customer “C”
 - Professional Customer “8” → Professional Customer “P”
 - Joint Back Office Firm “9” → Joint Back Office Firm “J”
 - Currently not supported and will not be supported on replatform
- **Liquidity Indicator** (9730) will no longer provided Alpha based enumerations for the following liquidity codes and instead will adjust to numeric IDs to match the remainder of the liquidity code set.
 - Undefined: X → 0
 - Maker: M → 1

- Taker: T → 2
- Response: R → 4
- Hidden: H → 5
- Opening: O → 6
- Cross: C → 7

- **Liquidity Indicator** (9730) will provide the following new liquidity codes where applicable
 - 53= Combo Taker Against Regular – Thru NBBO
 - 54= Combo Taker Against IO – Thru NBBO
 - 55= Simple Exposure Order – Upon Receipt
 - 56= Simple Exposure Order – Subsequent
 - 57 Simple Exposure Order – Responder
- FIX Drop will continue to support the granularity available in the existing MRX Platform to provide customers with the ability to configure their port to include orders, cancels and/or executions in a singular Execution report message that will carry all relevant information.
- MRX FIX Drop v2.0 will require participants to obtain new Ports/IPs ahead of the symbol migration with migrated symbols available on the new Ports/IPs and symbols that have not yet migrated available for quoting on the existing Ports/IPs.
- Participants will be required to maintain dual connectivity during the symbol migration to FIX Drop v2.0 and legacy FIX Drop v1.1.3, but the exchange will not charge for the duplicate ports during the migration month.
- Conformance is not required

Q: What is the impact to MRX CTI?

- MRX will introduce support for [CTI 2.2](#) with no specification changes compared to CTI 2.1 other than to introduce new liquidity codes
- CTI v2.2 will require participants to obtain new Ports/IPs ahead of the symbol migration with migrated symbols available on CTI 2.2 (new Ports/IPs) and symbols that have not yet migrated available on CTI 1.3 (existing Ports/IPs).
- Participants will be required to maintain dual connectivity during the symbol migration to CTI 2.1 and CTI 2.2 (replatformed), but the exchange will not charge for the duplicate ports during the migration month.
- Conformance is not required

Q: What market data feeds will be supported on the new MRX platform and what changes will be made?

- Nasdaq MRX will continue to support each of the current market data offerings.
- The **MRX Top Quote Feed** will be renamed to the MRX Top of Market Feed. It will remain a level-book feed designed to provide the Best Bid and Offer and last sale information. The feed will contain updated message formats that are harmonized with BX Options. Optional Glimpse service will also be made available for the Top of Market Feed. See the updated technical specifications for detailed changes.
 - [MRX Top of Market Feed](#)
 - [MRX Trade Feed](#)
 - [MRX Top of Market Feed Glimpse](#)

- The **MRX Depth of Market Feed** will no longer be a level-book based feed with top 5 levels of depth. Instead it will be an order-based feed providing full depth-of-book information. The new but familiar Depth of Market feed will share similar components to the recently updated BX Depth of Market Feed. Optional Glimpse service will also be made available for the Depth of Market Feed. See the updated technical specifications for detailed changes.
 - [MRX Depth of Market Feed](#)
 - [MRX Depth of Market Feed Glimpse](#)
- The **MRX Order Feed** will continue to provide a snapshot of each order that rests on the order book along with auction notifications but will take on updated message formats. Detailed changes can be found in the updated technical specifications.
 - [MRX Order Feed](#)
- The **MRX Spread Feed** will continue to be provided as a set of four separate components (Order, Depth of Market, Top of Market, and Trade) each providing different views of complex order activity. The message formats across all four of the spread feed components have been updated. The Depth of Market component will no longer provide the top 5 price levels and will instead provide order by order book updates. For ease of use specifications for each of the four spread feed components have been consolidated into a single document. Optional Glimpse service will also be made available for the Top of Market and Depth of Market component. See the updated technical specifications for detailed changes.
 - [MRX Spread Feed](#)
 - [MRX Spread Top of Market Feed Glimpse](#)
 - [MRX Spread Depth of Market Feed Glimpse](#)

Q: What will firms need to do in order to get connected to the new IP Addresses?

- Existing firms must send an email to [Nasdaq Global Information Services](#) and [Nasdaq Networking](#) to initiate the provisioning process and provide the following information in the email in order to be connected:
 - The feed(s) and/or service being requested.
 - The network interface "Peer IP Address" where they would like to receive the data.
- If your firm is not currently subscribed to the MRX data feeds, please complete the following agreements to receive the data.
 - [Data Feed Request Form](#) - Required for all firms.
 - [Nasdaq Global Data Agreement](#) - Required for all firms prior to initiation of the first Nasdaq data service only.
 - [System Application](#) - Required for firms only if the data will be displayed or used in a system that is not yet approved by Nasdaq.

Q: Why are these changes being made? What are the benefits?

- These changes are being made as a broader effort to harmonize exchange technology. The changes for market data feeds begin to bring conformance at the message type level and migrate our other derivatives markets in the future.
- Benefits from the change will increase over time as more of our markets migrate to the new platform. Common messaging will lower the amount of effort required to manage and maintain product and changes.

Q: Where can I find the new bandwidth expectations and market data connectivity information?

- Bandwidth expectations and market data connectivity information will be provided in a future update by the exchange and will cover instructions on obtaining access to the market data feeds on the new MRX platform.

Q: Will the market data feeds be made available for testing in the Testing Facility?

- Yes, the new Market data feeds will be available on the MRX Re-platform NTF environment for Telnet Connectivity testing on April 4, 2022. Full functional testing of the new market data feeds will also be available in the NTF environment on May 2, 2022. Instructions on requesting access for test in NTF are available in the [port request form](#)

Q: Will there be any price increases to the market data feeds with the re-platforming efforts?

- No. There are no plans to increase market data pricing as we migrate MRX to the new platform beyond the recent announcement on introducing fees for the MRX market data feeds. Details can be found in this [Data News Alert](#).

Q: Who can I contact to help answer additional questions on the market data changes?

- All market data related questions pertaining to the MRX re-platform can be sent to our Market Data Product Support team through the following channels:

Email: DataProducts@nasdaq.com

Phone: +1 301 978 5307

Connectivity and Testing

Q: What is the Migration Plan for the Replatform?

- MRX will migrate to the new platform on a symbol-by-symbol basis over a period of time to be determined and updated in a future announcement. The symbol migration is tentatively planned to begin on Monday, November 7, 2022.
- The Symbol Migration details can be found [here](#).
- MRX will announce the specific symbol migration details on a future date, including additional symbol migration roll dates and product Telnet connectivity testing dates. An overall migration timeline is as follows:

Readiness Milestone	Milestone Date
Customer Test System Available (NTF)	<ul style="list-style-type: none">• April 4, 2022 for Port/IP Availability• April 4, 2022 for Telnet connectivity Testing• May 2, 2022 for Functional testing
Production Simulation Environment	<ul style="list-style-type: none">• May 2, 2022 for Port/IP Availability• TBD for Telnet connectivity Testing
Customer UAT Prod Test - 1st	<ul style="list-style-type: none">• August 20, 2022
Customer UAT Prod Test - 2nd	<ul style="list-style-type: none">• September 10, 2022
Customer UAT Prod Test - 3rd	<ul style="list-style-type: none">• October 1, 2022
Final Confidence Test	<ul style="list-style-type: none">• November 5, 2022
Symbol Migration Begins	<ul style="list-style-type: none">• November 7, 2022
Symbol Migration Continues	<ul style="list-style-type: none">• November 14, 2022
Symbol Migration Completes	<ul style="list-style-type: none">• December 5, 2022

Q: When will Nasdaq MRX Test Environment (NTF) be available and what will it support?

- The MRX Replatform NTF environment is available to participants for Telnet Connectivity testing in April 2022.
- NTF Port request forms are available [here](#)
- NTF will support all trading functionality (with limited capacity) including SQF, OTTO, FIX, FIX Drop, CTI and Market Data Feeds. The NTF Member Simulation environment is available through the Carteret Data Center.
- The NTF environment is available Monday to Friday from 4:00 a.m. and 8:00 p.m. ET. Technical support will be available to participants from Monday to Friday from 8:30 a.m. to 5:30 p.m. ET.
- Participants will be required to complete conformance testing, on a case-by-case basis depending on the protocol and participant, in the NTF environment in order to gain access to and test in the Production Simulation environment.

Q: Will conformance testing be required for participants?

- Conformance will be required for SQF v8.2d
- Conformance will be required for FIX v13.0
- Conformance will be required for OTTO v2.1.5
- Conformance will not be required for FIX Drop v2.0
- Conformance will not be required CTI v2.2
- Conformance will not be required for Market Data feeds

Q: When will a Production Simulation environment be available and what will it support?

- MRX will provide participants with a Production Simulation environment Telnet Connectivity testing beginning on a date to be determined and published in a future update. The Production Simulation environment will support end-to-end testing of all trading functionality including SQF, OTTO, FIX, FIX Drop, CTI and Market Data Feeds for the planned Saturday UATs.

Q: Will UAT testing be available?

- Yes, MRX will hold three Saturday Customer UATs and a final confidence test on the dates below:
- Saturday, August 20, 2022
- Saturday, September 10, 2022
- Saturday, October 1, 2022
- Saturday, November 5, 2022

Q: Will the Disaster Recovery site and/or set-up be changing?

- No, the MRX Disaster Recovery set-up will continue to be supported at the Nasdaq Data Center in Chicago as it is today. However, new DR Ports/IPs will need to be obtained in-line with the production requirement outlined in the Interface/API section above.

Q: When will IP addresses become available?

- Specific Port/IP details will be made available to participants in response to port request forms for SQF v8.2d, OTTO v2.1.5, FIX v13.0, FIX Drop v2.0 and CTI v2.2 ports. Port Request forms are available [here](#)
- NTF IP subnets and groups for above APIs and market data feeds are now available in the [Nasdaq Test Facility Guide](#)
- Production Market Data subnet IP, Port and Group information, will be published in a future update
- Note, only symbols migrated to new platform will be available on new market data feeds and new instances of APIs.
- Newly introduced functionalities will be available on FIX v13.0 after the symbol migration is complete as described above

Q: When will participants be able to begin connectivity and heartbeat testing?

- Telnet Connectivity testing will be available in April 2022 for the NTF environment and on a date to be determined and published in a future update for the Production Simulation environment. Contact [Nasdaq Subscriber Services](#) for additional details.

Membership & Registration

Q: Do I need to make any changes to my membership or registration with the Replatform?

- No changes are necessary for membership or registration unless a participant would like to change their membership or registration status.

Reporting

Q: Will reports be impacted as a result of the MRX Replatform?

- No, reports will not change as a result of the Replatform and participants will continue to access reports via Report HQ as they do today.

Rule Filings

Q: Where can I find the related rule changes for the MRX Replatform?

- Rule filings related to the MRX migration will be provided in a future update as they are filed. Rule changes are not effective until published.