# TECHNOLOGY REFRESH FAQS

## What is changing?

Nasdaq ® is currently undergoing a technology refresh on the Nasdaq NOM ® (NOM) trading "System". State-of-the-art hardware and software architecture will be deployed in order to achieve a more efficient and more robust infrastructure to support the growing needs of our Options Participants. The refresh is part of the NASDAQ commitment to leading the industry in technology standards.

## What will I need to do?

Options Participants will be required to make the necessary network and IP changes in order to connect to the new NOM System via their Specialized Quote Feed (SQF), Ouch to Trade Options (OTTO), Clearing Trade Interface (CTI), OTTO Drop, Fix Drop, Itch to Trade Options (ITTO), and Best of Nasdaq Options (BONO) ports. NASDAQ will begin testing the new NOM network **206.200.40.0/22 on August 15, 2016** in order to give our Participants ample time to prep their network configurations.

## Will the number of connections be changing?

After the migration is complete, CTI, OTTO Drop, FIX Drop, ITTO and BONO connection counts will stay the same. SQF and OTTO counts may be reduced since a single connection may be utilized to quote across all symbols, compared with the currently required two connections.

## Will the Technical Specifications be changing?

OTTO, Market data and CTI specifications will not change as a result of the refresh.

SQF specifications will change as outlined below.

Connectivity information will change for ports as noted above.

## What change will be made to the SQF specifications?

The SQF specifications will have a change to the response notification for a firm level purge request. Currently, the sequence field (offset 15) in the response captures the sequence for all the underlying purges that take place upon a firm level purge request. After the NOM technology refresh, the sequence field in the purge response from NOM will provide zero sequence for a firm level purge request.

## What is the schedule for the migration?

The Participant migration schedule is as follows:

**SQF, OTTO and Market Data Connectivity Testing:** Participants will be able to establish connection to new IPs beginning August 15, 2016 for connectivity testing. NOM will publish heartbeat messages over all new connections to assist Participants with connectivity verification.

**Participant UAT sessions:**
NOM was held Participant UAT on, Saturday, September 10, 2016.

**Market Data and CTI Migration:** As of October 3, 2016 participants will be required to receive data via the new IP address as symbols migrate to the new System. Participants will continue to receive data via the current IP address for symbols that have not yet migrated. Connections to the legacy feeds will be retired when the symbol migration is complete.

**Symbol Migration:** As noted above, Participants will be required to send SQF and OTTO interest over the new connections for the migrated symbols.   When all symbols have been migrated to the new System, legacy SQF and OTTO connections will be retired.

Symbol Migration schedule as follows:

| Date | Symbols/Symbol Range |
|------|----------------------|
| Monday, October 3, 2016 | AMD |
| Thursday, October 6, 2016 | ADBE, CELG, DAL, FOSL, LULU |

| Monday, October 10, 2016 | Remainder of Symbol Range A-M |
| Thursday, October 13, 2016 | PFE, QCOM, RDUS, SBUX, TSLA |
| Monday, October 17, 2016 | Remainder of Symbol Range N-Z |

## How do I obtain my new port IPs?

New IPs are available and any additional questions can be directed to NASDAQ Subscriber Services.

## Do I need to make changes if I connect via FIX?

Fix Drop ports connecting to the matching side will require new IPs.

## Will I need to setup new ports on PHLX and BX Options exchanges?

No, the technology refresh will apply to NOM only.

## Where can I find additional information?

Contact NASDAQ Market Operations at +1 215 496 1571.