CAT Testing for NYSE Arca Options Pillar Migration

September 7, 2021

Agenda

> NYSE

- Overview of Pillar Migration Strategy and Testing Plan
- > FINRA CAT
 - FINRA CAT Testing Support
 - Order Route Mapping
 - Coordinated Industry Test
- Contact Information
- > Q & A

NYSE Arca Options Pillar Migration

- Single codebase and connection specification supporting equities and options exchanges
- Reduced complexity, enhanced performance, resiliency and improved time to market
- Full hardware and network redundancy
- Migrate from TPIDs to MPIDs

NYSE Arca Options Pillar Migration

Migration Overview and Strategy

- 3-week symbol migration to NYSE Pillar begins November 1, 2021
- Existing LCN and IGN Connectivity can be utilized
- Legacy order, quote, market data protocols will not be supported
- Certification is required
 - Pillar Cert is available weekdays with a dedicated staff
 - Includes Prop data feeds, Trade Ops Portal and OPRA test connectivity
- Production Shadow environment is available for weekday testing with test symbols, and the following weekend dates
 - Remaining weekend testing opportunities: Sept. 11, Sept. 18*, Oct. 16*,
 Oct. 30 Final confidence test
 - * Firms are required to participate in one of two mandatory test dates

NYSE Arca Options Pillar Migration

- New Trading Platform
- New Trading Mnemonics (MPID) for CAT IMID
- New Session IDs
- Saturday Test Dates
 - 9/11/2021 Industry Test 1
 - 9/18/2021 Mandatory Industry Test 2
 - 10/16/2021 Mandatory Industry Test 3
- Saturday testing on both UTP and Pillar platforms

NYSE Arca Options Test Dates

FINRA CAT will perform Intervenue Linkage and provide feedback for the following Saturday test dates.

ARCAOP Saturday Test Date	FINRA CAT Assigned Trade Date	Submissions due	Maximum Submission date to participate in linkage
9/11/2021	9/13/2021	9/14/2021 8am	9/17/21 8am
9/18/2021	9/20/2021	9/21/2021 8am	9/24/2021 8am
10/16/2021	10/18/2021	10/19/2021 8am	10/25/2021 8am

Standard Industry Test

The Industry Test (IT) Environment is available for Industry Members to test for Phase 2d from 6/28/2021 through 12/13/2021.

- Submissions are in 2d format
- Ingestion validation
- Linkage feedback

Linkage Type	Linkage performed against
Intrafirm	Your firm's IT submissions
Interfirm	Other Industry Members' submissions to the IT environment
Exchange	Production Exchange data

Standard Industry Test Linkage

Other Industry Members

IM 1 IT submission

Linkage Feedback File

IM 2 IT submission IM 3 IT submission IM 4 IT submission IM 5 IT submission IM 6 IT submission **Exchanges**

Exchange 1 production Exchange 2 production Exchange 3 production Exchange 4 production Exchange 5 production

ARCAOP Test Linkage Feedback

- On designated testing trade dates, NYSE Arca Options Members should submit Saturday test activity instead of ARCAOP prod activity.
- NYSE Arca Options Members will receive a single Linkage feedback file containing:
 - vs. IM submissions & Exchange Production Data excluding ARCAOP production; and
 - vs. ARCAOP IT data from Saturday test

ARCAOP Test Linkage

IM 1 IT submission

Linkage Feedback File 1

Other Industry Members

IM 2 IT submission

IM 3 IT submission

IM 4 IT submission

IM 5 IT submission

IM 6 IT submission

Exchanges

Exchange 1 production Exchange 2 Production Exchange 3 Production Exchange 4 Production **ARCAOP IT** submission

Order Route Field Mapping

The field mapping for routed orders is the same for NYSE Arca Options Pillar as the other NYSE Pillar gateways. The Order Routing Field Mapping document will be updated on the catnmsplan.com website.

CAT Report Field	Exchange-Related Field	
senderIMID	Firm Identifier – MPID	
routedOrderID	CIOrdID (Tag 11) · FIX Users · Binary Users	
symbol	Symbol	
eventTimestamp	Trade Date	
session	SenderCompID · FIX Users Username · Binary Users	

Key Dates for Coordinated Industry Tests

Test Number	CAT Trading Day of the Coordinated Industry Test	Data Due to Industry Test	List of Participating IMIDs Posted as Reference Data on the CAT Website
1	9/10/21	By 8 am on 9/13/21	By 9 am on 9/15/21
2	10/1/21	By 8 am on 10/4/21	By 9 am on 10/6/21
3	10/15/21	By 8 am on 10/18/21	By 9 am on 10/20/21
4	10/29/21	By 8 am on 11/1/21	By 9 am on 11/3/21
5	11/12/21	By 8 am on 11/15/21	By 9 am on 11/17/21
6	11/26/21	By 8 am on 11/29/21	By 9 am on 12/1/21

Contact Information

NYSE Arca Options Exchange

NYSE Pillar

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- Click the "Raise Hand" button at the bottom of the participant's window.
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