



## Cboe Integration Weekend Disaster Recovery Functional Test – Saturday, September 28, 2019

Reference ID: C2019092000

### Overview

In preparation for the migration of Cboe Options Exchange (“C1”) to Bats technology, Cboe will host the fifth of six weekend tests on **Saturday, September 28, 2019**. The weekend test conducted on September 28, 2019 will be a functional Disaster Recovery (DR) data center test. This test will allow firms with Reg SCI DR testing requirements for C1 an opportunity to perform a functional pre-test before the October 26, 2019 Reg SCI test.

**During this test, firms must connect to their DR ports in order to participate.** Firms can use the Logical Port tool available on the Customer Web Portal to locate port IP address information.

**TPHs must certify in the C1 certification environment for each order entry protocol (FIX/BOE/BOE Quote) they intend to utilize before they will be permitted to participate in weekend testing.**

### C1 Integration Test Details

TPHs are encouraged to participate and test the following:

- connecting to the DR environment,
- entering orders during simulated GTH and RTH sessions,
- FIX Drop and ODrop functionality,
- receipt of market data feeds of interest,
- using the Clearing Editor,
- using Market Maker Appointment tools, and
- exercising Volatility Settlement system functionality.

Additionally, on-floor TPHs will be permissioned to:

- route orders from PULSe (or their own proprietary system applications),
- access and execute orders from PAR,
- view live data wall updates, and
- receive Market Maker notifications (MMTNs).

TPH Firm Administrators may also:

- utilize Order Look Up for order history,
- utilize the Clearing Editor to adjust trades and view unmatched trades,

- review Floor Permit Assignments, and
- review Market Maker EFID associations.

All TPHs with a floor presence will be **required** to participate in the final production readiness weekend test in addition to at least one other test. Refer to the Remaining C1 Integration Weekend Test Dates section below for the complete list of test dates.

Testing for both electronic and floor trading will be available in all applicable Production Classes/Series. All symbols supported on the current production trading platform will be made available for order entry and trading during each weekend test. Additionally, the exchange will provide artificial liquidity for the following underlying symbols:

AAPL, AMAT, BA, BABA, BKNG, CAT, DE, DIA, FB, GLD, GOOG, GS, INTC, IWM, JPM, M, MSFT, NFLX, NVDA, PEP, PYPL, SLB, SQ, TSLA, TTD, UVXY, WYNN, XOM, QQQ, AMZN, SPY, VIX, VIXW, XSP.

SPIN and gap requests as well as market dissemination of all quotes and trades over OPRA and Cboe Market Data Feeds will be available for testing. The trade date for all transactions on all exchange messaging (e.g. order acknowledgements, execution reports, drop, and market data) during this test will be the actual calendar date (i.e. 09/28/2019). TPHs and ISVs must be certified in the new C1 trading platform to submit orders for the duration of the test. Certification is not required in order to receive market data.

## **Volatility Settlement**

Saturday, September 28, will be configured as a Volatility Settlement date using the 25-Oct-19 expiration of weekly SPXW options as constituent series. See section 3.11 of the [US Options Opening Process](#) specification, 'Volatility Opening Process (Constituent Series),' for details on system functionality related to Volatility Settlements. The following Volatility Settlement functionality will be available for use during this weekend test (related Opening Process Specification section noted in parentheses):

- Constituent series symbol mapping file download (3.11.1).
- Constituent series symbol mapping on PITCH, TOP, Opening Process, and Auction data feeds via the Constituent Symbol Mapping message (3.11.1).
- Expected Opening Information ("EOI") for constituent series via live updating web page (3.11.2).
- EOI snapshot for constituent series via JSON endpoint (3.11.2).
- The strike range in use for calculating the Special Opening Quote ("SOQ") is observed on the EOI web page and JSON interface. The strike range will be updated at approximately 8:45 a.m. ET, at which time the SOQ Strike Range Update message will be observed on data feed and will be reflected on the EOI web page and JSON interface (3.11.3).
- Before and after cutoff time (9:20 a.m. ET) system behavior unique to constituent series including post-cutoff restrictions and Settlement Liquidity on Open ("SLOO") orders (3.11.6).

## **Customer Web Portal Data Availability**

To allow firms to become familiar with C1 files and reports, a subset will be made available in the production environment during weekend tests and in the certification environment during the week via the Customer Web Portal.

During weekend tests, the daily Trade Data file for C1 will be available for download from the Customer Web Portal in the production environment.

During weekday testing with test symbols, members who have previously requested access to the monthly Trade Detail file in other certification environments will have access to the C1 Trade Detail file. Requests for access to the monthly Trade Detail file within the new C1 certification environment may be submitted to the Cboe Trade Desk. Additionally, the C1 Trade Data file and Volume History are accessible in the C1 certification environment.

## **OCC Testing Opportunities**

OCC testing will be available to clearing members with prior request to the OCC. Customers will not be able to obtain any real-time clearing records on Saturday during testing from the OCC, but if they wish to obtain DDS records for the Saturday test date activity, they may submit a testing request with the OCC (see link below). The test trades will be executed in one of OCC's external test environments, and DDS test records will have a business date of the Monday following each Saturday test date.

Additionally, please be advised that the **C1 certification trading platform** will be submitting real-time clearing data to the OCC's external test environments Monday through Friday until Friday, October 4, 2019. Firms interested in accessing test clearing records based on C1 certification environment test activity during this time may also submit an OCC testing request.

OCC external testing requests are initiated by completing an online form with the OCC. The form is available on the OCC Website from the 'Clearing & Services / Certification Testing Services' menus or directly from the following link:

➤ <https://www.theocc.com/clearing/certification-testing/default.jsp>

**OCC supports a minimum 1-week lead time for all test requests in order to confirm system and resource availability as well as to complete any pre-test verifications.**

Submitted test requests will be responded to within two business days of receipt; please be sure to reference C1 Certification Testing. The Technical Certification and Documentation Services group will then initiate the process of confirming the scope, timeline, and needed inputs/outputs for the test, including test connectivity.

## **FLEX Options Order Entry with Cboe Silexx**

As part of the C1 migration, Cboe Silexx will replace the current C-FLEX order entry system. In order to become familiar with the new system, current C-FLEX users should request Certification and Production Cboe Silexx login credentials; Production login credentials are required to participate during weekend tests. To request login credentials or for any other Cboe Silexx inquiries, please contact [silexx-sales@cboe.com](mailto:silexx-sales@cboe.com).

## **Trade Floor Access**

During the Saturday weekend test, access to the 400 S. LaSalle Street building will be permitted through the main entry (north side) only to those having a valid building ID. Cboe access badges will work even if the badge normally has only Monday through Friday access privileges.

## **Test Schedule**

	<b>Test Schedule (all times in Eastern Time zone)</b>
8:00 a.m.	C1 Options production environment available for connection. The system will be in the Pre-open queueing session for Global Trading Hours "GTH").
8:30 a.m.	GTH session opens for SPX, VIX, and FLEX products. Pre-open queueing session begins for Regular Trading Hours ("RTH").
9:15 a.m.	GTH session ends.
9:30 a.m.	RTH session opens.
1:00 p.m.	RTH session closes.

In order to test any other transitions, including persistence of GTCs, please plan to participate in testing in the production environment using test symbols during a normal weekday. A list of supported test symbols is available on [markets.cboe.com](https://markets.cboe.com). The file can be found by navigating to "Our Markets" > "U.S. Options" > "Market Statistics" > "Product Info" > "All Series (CSV)".

## **Remaining C1 Integration Weekend Test Dates**

The final C1 Integration Weekend Test is scheduled for Saturday, October 5, 2019. **The final test is compulsory for TPHs with a floor presence.**

## **Additional Information**

For additional information about the migration of Cboe Options to Bats technology, refer to the following documents:

- [Important Cboe Options Exchange Migration Update](#)
- [C1 Technical Integration FAQ](#)

Please contact the Cboe Trade Desk for support or with any questions. TPHs who are planning to participate in testing trading floor functionality (i.e. PAR, PULSe, Silexx) should contact the Cboe OSC prior to the planned testing date. Additionally, you may refer to the C1 integration website for more details at <https://batsintegration.cboe.com/c1>.

We appreciate your business and remain committed to powering your potential with Cboe products, technologies, and solutions.

**Cboe Trade Desk**  
913.815.7001  
[tradedesk@cboe.com](mailto:tradedesk@cboe.com)

**Cboe OSC**

866.728.2263

[osc@cboe.com](mailto:osc@cboe.com)

**Chicago Building Security Office (Building Access Questions)**

312-786-7333

[chicagosecurityoffice@cboe.com](mailto:chicagosecurityoffice@cboe.com)