



Final Reminder - CFE Announces BOEv3 Protocol Release and Weekend Testing Dates

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Overview

Applicable Cboe Exchange: CFE

As [previously communicated](#), Cboe Futures Exchange, LLC ("CFE") plans to introduce a new version, version 3, of its Binary Order Entry ("BOE") protocol effective **June 6, 2021**. The BOEv3 protocol will offer fixed length messages, a single gateway per matching unit, and enhanced determinism.

CFE BOEv3 Rollout Schedule

The rollout schedule, including the final weekend test is detailed in the table below.

Rollout Schedule

Date	Milestone
4/4/21	BOEv3 Certification ports available. Formal certifications begin.
4/18/21	FIX/BOEv2 traffic to pass through BOEv3 gateways in Production.
5/2/21	Production BOEv3 ports may be requested by certified TPHs.
5/8/21	Weekend Test #1 for certified TPHs.
6/5/21	Weekend Test #2 for certified TPHs.
6/6/21	Production Launch of BOEv3.

Technical Details

New BOEv3 Specification

CFE has released version 1.0.6 of the BOEv3 specification, which is available in the [Technical Specifications](#) section of the CFE public website. The BOEv3 specification includes a section highlighting the notable differences between BOEv2 and BOEv3 to allow CFE Trading Privilege Holders ("TPHs") to better understand all pertinent updates in the BOEv3 protocol.

Certification Requirement

TPHs interested in using the BOEv3 protocol **will be required to formally certify with the CFE Trade Desk** using the [Certification Tool](#) in the [US Customer Portal](#) prior to requesting any production BOEv3 ports. Certification ports will be made available per the schedule noted below. Certification scripts are available for both BOEv3 orders and BOEv3 quotes.

Updated CFE Order Entry Architecture

A BOEv3 gateway server will be placed directly in front of each matching unit, and all traffic (including FIX and BOEv2 traffic) will pass through a BOEv3 gateway before reaching the destination matching unit. The BOEv2 and FIX protocols will allow TPHs to access all symbols from a single port while BOEv3 TPHs will be required to utilize a BOEv3 unit port for the matching unit that processes the symbol they desire to trade. Inbound order, quote, modify, and cancel messages originating from any supported CFE order entry protocol will be deterministically ordered by the CFE system once those messages arrive at the BOEv3 gateway for the applicable matching unit. See “Appendix A: Architectural Diagrams” in the BOEv3 specification for details on this architectural change that will impact all order entry traffic on CFE.

TPHs will be able to obtain BOEv3 unit order ports which allow for the submission of orders, BOEv3 unit quoting ports which allow for the submission of quotes and orders, and BOEv3 unit purge ports which allow for the cancellation of orders and quotes across multiple ports for the same matching unit. BOEv3 unit ports will also be referred to as unit match capacity allocations in CFE rules and the CFE Fee Schedule. Fees for BOEv3 ports were previously announced in [this notice](#).

Please be advised that CFE plans to decommission the BOEv2 protocol in favor of BOEv3. The sunset date for BOEv2 will be sometime after June 6, 2021 and will be announced at a later date. There are no plans to decommission the CFE FIX order entry protocol.

Weekend Test Schedule

CFE began accepting TPH requests for BOEv3 ports in the certification environment on Monday, April 5, 2021. At that time, TPHs also became eligible to complete their formal certifications for the BOEv3 protocol using the [Certification Tool](#) in the [US Customer Portal](#). The rollout schedule, including the final weekend test is detailed in the table below.

During Weekend Test #2 on June 5, 2021, CFE plans to allow certified TPHs the opportunity to test using production BOEv3 Match Capacity Allocations ordered prior to the Saturday, June 5th test date. In addition, FIX and BOEv2 users are welcome to participate in this weekend test by sending orders/quotes and confirming receipt of CFE market data.

Test Schedule (all times CT)

Time	Test Milestone
8:00 a.m.	FIX, BOEv2, and BOEv3 connectivity will be made available
8:15 a.m.	Start of pre-open
8:30 a.m.	Trading begins
~9:30 a.m.	Failover of Unit 1 (VX futures) BOEv3 Gateway to Backup in Primary Datacenter <ul style="list-style-type: none">• BOEv2/FIX customers will also be impacted
~10:00 a.m.	Failover of one BOEv2/FIX order handler server <ul style="list-style-type: none">• Subset of BOEv2/FIX customers impacted
~10:30 a.m.	Failover of Matching Unit 1 (VX futures) <ul style="list-style-type: none">• All order entry and market data customers impacted
12:00 p.m.	Trading ends <ul style="list-style-type: none">• Daily settlement prices calculated and disseminated resulting in TAS restatements.
12:30 p.m.	End of test, system shutdown

Updated Regulatory Requirements

CFE Regulation has issued Regulatory Circular [CFERG21-001](#) in relation to the BOEv3 release.

Additional Information

For more information, please refer to the following technical specifications:

- [CFE BOEv3 Specification](#)

Please contact the CFE Trade Desk for support or with any questions.

We appreciate your business. Our trading community inspires and drives our mission of defining markets.

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