

# **CBOE Application Programming Interface**

**CBOE API Version 9.0.1 - Release Notes** 

Provides an overview of upcoming changes in the next production release of the CMi

# CBOE PROPRIETARY INFORMATION

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#### **Front Matter**

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### **Support and Questions Regarding This Document**

Questions regarding this document can be directed to The Chicago Board Options Exchange at 312.786.7300 or via e-mail: api@cboe.com.

The latest version of this document can be found at the CBOE web site: http://systems.cboe.com/webAPI.

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#### Overview

This document highlights upcoming documentation changes in the new point release of the CMi API, Version 9.0.1. The sections below detail the changes in this release. Your feedback or questions regarding this document should be sent to <a href="mailto:api@cboe.com">api@cboe.com</a>.

## CMi API V9.0.1 Highlights

The upcoming CBOEdirect software release provides overall performance improvement on order, quote, cancel and execution report generation and dissemination.

## **Quote Processing**

CBOE has improved its quote processing time by allowing quotes to be submitted concurrently even for a given class. The concurrent thread model is now the standard. The redefined quote process allows multiple concurrent quote messages up to a configurable limit. Please note that, unless explicitly mentioned, all quote messages referred to in the following section are messages acting on the same trading class. A quote method is any of the following requests: acceptQuote, acceptQuotesForClass, cancelQuote, cancelQuotesByClass and cancelAllQuotes.

The following behavior should be considered by the quoting Firm:

Due to the asynchronous nature of the concurrent quote message calls; it is very important that the same series not be included in multiple quote blocks. While CBOE will not enforce any restriction with regard to this check, the order of processing of the individual calls is <u>not</u> guaranteed. The quote processing changes are as follows:

- 1. The CAS will allow multiple concurrent quote messages up to a configurable limit. These requests include *acceptQuote and acceptQuotesForClass*. The limit at this time is 10.
- 2. Immediately before the quote message is to be dispatched the quote rate limits are checked. If the call or quote rate limits are not exceeded the message is dispatched.
- 3. When the number of concurrent quotes in-flight equals the maximum allowed, any new *acceptQuote* or *acceptQuotesForClass* calls will be **rejected** with a NotAcceptedException.

The error code in this case will be *EXCEEDS\_CONCURRENT\_QUOTE\_LIMIT* (4160) and error text will say, "Concurrent Quotes exceeded the limit (imit>)".

- 4. The cancelQuotesByClass and cancelAllQuotes requests will be forwarded to the server immediately without regard to the number of concurrent quote messages currently in progress.
- 5. While any cancelQuotesByClass is in flight to the server, any new quote request calls (includes acceptQuote, acceptQuotesForClass and cancelQuote) will be **rejected** with a NotAcceptedException.

The error code in this case will be *QUOTE\_CANCEL\_IN\_PROGRESS* (4170) and error text will say, "*Quote Cancel by class is in progress*".

6. Block quote cancels (block of 0-0 quotes coming through the acceptQuotesForClass calls) are considered to be a acceptQuotesForClass calls and could be rejected if the

- number of in-flight quote requests to the server exceed the limit or if a cancelQuotesByClass is in-flight.
- 7. A cancelAllQuotes request is always forwarded to the server. Due to the asynchronous nature of the cancel all quotes request, the CAS will not prevent any new quotes message or quote cancel message (including another cancelAllQuotes) from being forwarded to server while a previous cancel all quotes request is in progress.

## **IDL** Interfaces

No changes

## **Document Changes**

#### API-01

No changes

#### API-02

- Updated the Quote Processing Enhancement section as described above.
  - Due to the asynchronous nature of the concurrent quote message calls; it is very important that the same series not be included in multiple quote blocks. While CBOE will not enforce any restriction with regard to this check, the order of processing of the individual calls is <u>not</u> guaranteed. The quote processing changes are as follows:
  - 1. The CAS will allow multiple concurrent quote messages up to a configurable limit. These requests include *acceptQuote and acceptQuotesForClass*. The limit at this time is 10.
  - 2. Immediately before the quote message is to be dispatched the quote rate limits are checked. If the call or quote rate limits are not exceeded the message is dispatched.
  - 3. When the number of concurrent quotes in-flight equals the maximum allowed, any new *acceptQuote* or *acceptQuotesForClass* calls will be **rejected** with a NotAcceptedException.
    - a. The error code in this case will be *EXCEEDS\_CONCURRENT\_QUOTE\_LIMIT* (4160) and error text will say, "Concurrent Quotes exceeded the limit (imit>)".
  - 4. The cancelQuotesByClass and cancelAllQuotes requests will be forwarded to the server immediately without regard to the number of concurrent quote messages currently in progress.
  - 5. While any cancelQuotesByClass is in flight to the server, any new quote request calls (includes *acceptQuote*, *acceptQuotesForClass and cancelQuote*) will be **rejected** with a NotAcceptedException.
    - a. The error code in this case will be *QUOTE\_CANCEL\_IN\_PROGRESS* (4170) and error text will say, "*Quote Cancel by class is in progress*".

- 6. Block quote cancels (block of 0-0 quotes coming through the acceptQuotesForClass calls) are considered to be a acceptQuotesForClass calls and could be rejected if the number of in-flight quote requests to the server exceed the limit or if a cancelQuotesByClass is in-flight.
- 7. A cancelAllQuotes request is always forwarded to the server. Due to the asynchronous nature of the cancel all quotes request, the CAS will not prevent any new quotes message or quote cancel message (including another cancelAllQuotes) from being forwarded to server while a previous cancel all quotes request is in progress.

## API-03

• No changes

#### API-04

No changes

#### API-05

No changes

#### API-06

• No changes.

#### API-07

• No changes

#### API-08

No changes

## **CAS-01**

No changes

#### **CAS-02**

No changes

### **Simulator**

No changes

## **Test Plan Changes**

No changes