



CBOE Application Programming Interface

CBOE API Version 4.2.4 - Release Notes

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

CBOE PROPRIETARY INFORMATION

18 January 2008

Document #[API-00]

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 changes in the new release of the CMi API, Version 4.2.4. This release supports new IDL constants and documentation changes. There are no Simulator changes. Users can continue to use the CMi V4.2 simulator. The sections below detail the changes in this release. Your feedback or questions regarding this document should be sent to api@cboe.com.

CMi V4.2.4 Highlights

SAL and HAL in Hybrid 3.0 Classes

Effective January 23, 2008, SAL and HAL will be activated in the Hybrid 3.0 (non-Hybrid index) Classes (SPX, OEX and MVR). The SAL mechanism is an auction that allows for electronic price improvement on eligible simple (non-complex) marketable orders. HAL is a mechanism that alerts members to limit orders entering the book. Both SAL and HAL are represented in the `cmiConstants.idl` module.

```
const cmiParam::AuctionType AUCTION_HAL = 4;
const cmiParam::AuctionType AUCTION_SAL = 5;
```

As in all other Hybrid classes, the HAL flash period will be 700ms, and the allocation algorithm will be pro-rata. However, when the Exchange's BBO is represented by a manual quote on the same side as the incoming order, the limit order will automatically route to the electronic book instead of being processed by HAL and the manual quote will be canceled.

SAL details for non-Hybrid index classes are as follows:

1. Eligible marketable orders will be stopped at the LMM quote and exposed to a brief (300ms) electronic auction for price improvement. Customer orders of 50 contracts and less will be eligible.
2. The starting price for the auction will be the LMM quote. The auction increment in all three classes will be \$.05 below \$3.00 and \$.10 above \$3.00.
3. The auction message will be available to all market makers with appointments in the class and firms that have orders resting at the BBO.
4. At the end of the auction period, the order will be executed at the best price(s), including any customer book orders, auction responses and the LMM auto-quote.
5. The trade will be allocated using pro-rata, with each user's response capped at the size of the incoming order (i.e. "capped" pro-rata).
6. An auction will not begin if the incoming order size exceeds the LMM quote size or if a manual quote is present on the BBO on the opposite side of the incoming order.

Billing Type Indicators

Two new Billing Type Indicators are introduced in this release: `ODD_LOT_FLASH` and `ODD_LOT_RESPONSE`. `ODD_LOT_FLASH` is used for CBSX odd lot orders or the odd lot portion of a mixed lot order that is being flashed. `ODD_LOT_RESPONSE` is used for all

responses to odd lot orders that are being flashed. Both indicators are represented in the cmiConstants IDL.

IDL Interfaces

New and modified IDL is reflected in **bold** face.

```
module cmiConstants
{
    typedef char BillingTypeIndicator;
    interface BillingTypeIndicators
    {
        const BillingTypeIndicator MAKER          = 'A';
        const BillingTypeIndicator TAKER          = 'R';
        const BillingTypeIndicator FLASH_RESPONSE = 'E';
        const BillingTypeIndicator FLASH          = 'F';
        const BillingTypeIndicator CROSS          = 'C';
        const BillingTypeIndicator LINKED_AWAY     = 'X';
        const BillingTypeIndicator LINKED_AWAY_RESPONSE = 'L';
        const BillingTypeIndicator OPENING        = 'O';
        const BillingTypeIndicator ODD_LOT_FLASH    = 'N';
        const BillingTypeIndicator ODD_LOT_RESPONSE = 'B';
    };
};
```

Document Changes

API-01

- No changes

API-02

- Removed all references to RAES
- Added a section for Remote Transaction Timeout Exceptions (RTT) that states the following.

An Addition to CBOE inbound Order and Quote error handling is a quality of service feature wherein the processes will set a maximum service time for an inbound order or quote to process internally within the CBOEDirect system. The intention of this addition is to release control of the inbound processing back to the end user with an indication an error or slow down has occurred without waiting for the situation to clear. While the request will abort with an exception it does not mean the original request will not eventually complete. This is in

essence a “maybe” condition and it will require the user to take action to with regard to the inbound quote or order stream at the time of the error.

Specifically, the user should:

1. Take immediate action to compensate for the ambiguous message failure. If a Quote message is involved, cancel the quote(s) in question or log out to cancel any resting quotes.
2. If an order origination request failed, a cancel request should be sent to ensure the order is not in the market before taking an alternate action regarding the order. If an order cancel is in question the cancel request could be resubmitted.

Please contact the CBOE helpdesk to help determine where and what the internal communications involved failed or succeeded if there is any doubt.

API-03

- Added values for new constants based on this release.

```
const BillingTypeIndicator ODD_LOT_FLASH    = 'N';
const BillingTypeIndicator ODD_LOT_RESPONSE = 'B';
```

API-04

- Added values for new constants based on this release.

```
const BillingTypeIndicator ODD_LOT_FLASH    = 'N';
const BillingTypeIndicator ODD_LOT_RESPONSE = 'B';
```

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. Users can continue to use the CMi V4.2 simulator.

Test Plan Changes

- No changes