Cboe BZX and EDGX Options Exchanges Feature Pack 2

Overview

As part of the previously announced migration of the C2 Options Exchange to the Bats technology platform, the BZX Options and EDGX Options Exchanges will release Feature Pack 2 on December 8, 2017.

Feature Pack 2 Summary (pending regulatory approval)

- ContraBroker (FIX Tag 375) will be updated to reflect the contra side OCC Clearing Number on all internally matched executions. This new behavior will apply to all executions. Monthly Trade Detail and daily Trade Data files will also be updated to include the updated ContraBroker information. These monthly and daily files are available for download via the Web Portal.

- ContraTrader (FIX Tag 337) will be introduced to reflect the contra side EFID (OnBehalfOfCompId) on all internally matched executions. This new behavior will apply to all executions. Monthly Trade Detail and daily Trade Data files will be updated to include the new ContraTrader information as an additional column at the end of the files. These monthly and daily files are available for download via the Web Portal.

- ContraCapacity (FIX Tag 7694) will continue to be offered on the BZX Options and EDGX Options Exchanges and also be introduced on the C2 Options Exchange upon migration to the Bats technology platform. Monthly Trade Detail and daily Trade Data files will continue to include ContraCapacity information.

Risk Enhancements

- Market Order NBBO Width Protection will be introduced which will result in Market Orders being rejected if the NBBO width is greater than 100% of the midpoint (with a minimum value of $5.00 and maximum value of $10.00):

  Example:
  - NBBO = $1.00 x $4.00
  - Midpoint = $2.50 x 100% = $2.50 (min of 5.00 is used instead)
  - NBBO Width = $4.00 – $1.00 = $3.00
  - Even though the width is greater than 100% of the midpoint, Market Orders entered would be accepted since the $5.00 minimum will apply in this example.

- Drill-Through Protection for Limit Orders will be introduced and will replace the existing Market Order Collars of 5% or $0.50 through the NBBO:
  i. The Drill-Through check will allow orders to be executed up to a maximum price through the contra side NBBO at time of order entry:
Fat Finger Checks will be **updated** making them mandatory for both Pre-Market and Regular Sessions. The following Exchange defaults will be applied if not specified by user:

<table>
<thead>
<tr>
<th>Range</th>
<th>Max Value</th>
<th>Fat Finger % Default</th>
<th>Fat Finger Dollar-Based Limit Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.00 - $1.99</td>
<td>$0.15</td>
<td>No Value</td>
<td>$1.00</td>
</tr>
<tr>
<td>$2.00 - $5.00</td>
<td>$0.30</td>
<td>No Value</td>
<td>$1.50</td>
</tr>
<tr>
<td>$5.01 - $10.00</td>
<td>$0.40</td>
<td>No Value</td>
<td>$2.00</td>
</tr>
<tr>
<td>$10.01 - $20.00</td>
<td>$0.50</td>
<td>No Value</td>
<td>$3.00</td>
</tr>
<tr>
<td>$20.01 - $50.00</td>
<td>$0.70</td>
<td>No Value</td>
<td>$4.00</td>
</tr>
<tr>
<td>$50.01 - $100.00</td>
<td>$0.80</td>
<td>No Value</td>
<td>$6.00</td>
</tr>
<tr>
<td>$100.01 &amp; Above</td>
<td>$1.00</td>
<td>8%</td>
<td>Not Valid</td>
</tr>
</tbody>
</table>

Please see the [Web Portal Port Controls Specification](#) for complete details.

Simple Buy Put Checks will be **introduced** where a limit (market) Buy order for a Put option will be rejected if the limit (execution) price is greater than or equal to the option’s strike price. These checks will not apply to complex orders or non-standard delivery classes.
Rollout Schedule

Testing of the new Feature Pack functionality will be available in the BZX Options and EDGX Options Certification environments per the following schedule.

<table>
<thead>
<tr>
<th>Target Date</th>
<th>Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/17/17</td>
<td>Options Feature Pack 2 in Certification; Technical Specifications Updated</td>
</tr>
<tr>
<td>12/08/17</td>
<td>Options Feature Pack 2 in Production</td>
</tr>
</tbody>
</table>

More Information

For more information, regarding the migration to the Bats technology platform, refer to the Cboe Integration Website or the following technical specifications:

Market Data
- US Equities/Options Multicast PITCH
- US Options Complex Auction Multicast PITCH
- US Options Complex Multicast TOP
- US Options Complex Multicast PITCH

Order Entry
- US Options BOE Specification
- US Options FIX Specification

Please contact the Cboe Trade Desk or your Sales Account Manager with any questions.

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