

CD8.3.3 (“8.3++”) Release Notes

This document describes change included in this release. This release is principally related to changes required to further reduce trade server latency.

WR#6566 Latency 5

The contributions from the latency team to this release are as follow:

1) Reflection-Free Order Book (a.k.a “RFOB”)

This change removes all field-level and transaction management from the order book. Rather than track changes to the order book structure during business processing, all changes are made directly to the book. In case of a rollback of a business transaction, the order book will be automatically rebuilt (including quotes). It is anticipated that this will significantly improve the trade server response time for orders, quotes, and trades.

2) Configuration for GC TTE on other processes

The changes made in previous releases to track trade TTE data for call to the global server from the trade server are expanded to track this data for global server calls from all other processes (for example, status server, OHS, linkage server, copp bridge).

3) Avoid calling GlobalServer via UserMaintenanceService inside class-level lock for MMTN floor trade deletes.

4) Avoid create order structs when generating fill reports

5) Exchange volume structs are now flyweight objects to avoid high-frequency allocations.

6) Order market monitoring for CBSX has had queries eliminated and moved persistence to be asynchronous.

7) Do not call spread legs for cancels if the cancel results in a legal market

8) Filters applied to the recap channel are now a set of simple filters rather than a complex filter, to improve the opening performance

9) Converted static string table to use the modified infra interface to use char[] rather than byte[] (more efficient)

10) Increased connection pool between OHS and trade servers from 12 to 50

Infrastructure

Rollback Listener Support in Nested Transactions

The infrastructure group have added a new type of transaction listener to allow for callbacks to be invoked after any rollback in the current transaction context, including inner transactions. This feature is necessary to support the reflection-free order book,

described above.

Byte-Based CORBA String Factory Interface

The string factory support currently supported in the infra IDL compiler has been changed to specify a byte array rather than a char array. This is to avoid the unnecessary char array allocation and copy which would otherwise be required. The server group's code base implementing these string factories will need to update it's API.

SEDL List

SEDL #8691 – Fix NPE in complex auction expiration

(no test plan – regression only for this race-condition bugfix)

SEDL #8696 – Cancel ND's on Close (for OSI)

("SEDL_8696.doc")

SEDL #8700 – MMTN Delete Fix (avoid over—canceling)

("Test Plan PITS 22027 - SEDL 86 97 & PITS 22249 - SEDL 8700.doc")

SEDL #8704 – Shipped quantity incorrect (made volatile)

("SEDL- 8704 PITS - 21676 Test Plan.doc")

SEDL #8711 – MMTN Delete Fix (add side info for CTMr)

("TestPlan_SEDL_8711.doc")

SEDL #8741 – BC81 Deadlock Issue (CPS product lock)

(no test plan – regression only for this race-condition bugfix)

SEDL #8763 – BOB Defect (from 8.3 testing)

Fix for BOB Regression Plan, test #9 "Incoming marketable Volume Contingency AON & FOK orders are routed back when max tradable qty (Customer order book size + Auto-Ex size) is less than order qty".

SEDL #8737 – QCT cxl/re issue (from 8.3 testing)

("TestPlan_PITS-22929_SEDL-8737.doc")

SEDL #8697 – Accept all account info for MMTNs

("Test Plan PITS 22027 - SEDL 8697 & PITS 22249 - SEDL 8700.doc")