



INCIDENT REPORT

December 6, 2011

No. MARKET-001

Incident Date:

December 6, 2011

Incident Priority:

Critical

Incident Summary:

An issue was experienced with a new feature introduced with Release 5.0 of the Alpha ATS Trading Engine. It specifically affected the Protect Cancel / Protect Reprice functionality and consequently the quality of overall market data distribution. This led Alpha ATS to halt trading in all TSX and TSXV listed securities which are available for trading on Alpha ATS, and not open up the market for trading during the remainder of the day.

Business Impact:

Inability for Subscribers to perform order entry activities on Alpha ATS.

Duration:

Approximately from 10:20AM for the remainder of the trading day.

Problem Analysis and Resolution:

At approximately 10:20AM, Alpha ATS monitoring tools identified a market data mismatch between the data feeds distributed by the primary and the secondary matching engines processing one of the instrument groups.

Initial queries from Alpha ATS Subscribers started coming in, whereby they indicated that they were facing issues with market data and with cancelling some orders. After an assessment of the situation, at approximately 10:38AM Alpha ATS halted trading in all TSX and TSXV instruments available for trading on Alpha ATS. This was followed by a critical incident notification at 10:42AM to Alpha ATS Subscribers, Vendors and Regulators. Regular updates were provided afterwards.

Continued investigation pointed in the direction of a synchronization issue of third-party marketplaces market data between the primary and secondary matching engines of the affected instrument group. This led to an order number sequencing issue for Protect Cancel / Protect Reprice orders, which use third party marketplaces market data, affecting in turn overall market data dissemination. A new feature aiming at optimizing the reading of third-party marketplaces market data introduced with release 5.0 of the Alpha ATS Trading Engine was at the basis of the issue.

Considering the nature of the issue and the time required to establish a workable solution for normal trading, Alpha ATS finally decided to bring Alpha ATS back up under a halted state from approximately 3:15pm until 5:00pm to allow Subscribers to connect to Alpha and cancel any existing orders.

During that same period, Alpha ATS also contacted all Subscribers with active orders to advise them that they could cancel orders or request order cancellations from Trading Services.

While the issue has been identified and confirmed, the fix is still under testing and will not be deployed tomorrow. A work-around which allows to prevent the issue will however be implemented to allow for normal trading. The work-around eliminates the synchronization issue, and all downstream implications experienced from a market data perspective, by only using the primary matching engines.

Normal trading will take place on Wednesday, December 7th.

We strongly recommend that Subscribers verify their long orders tomorrow morning before the opening of the market. Alpha ATS will be fully staffed as from 7:00AM, to assist Subscribers with any outstanding order cancellation requests or issues. Staff can be reached at **647-259-0450 / 877- ATS ALF1** or via email at clientservices@alpha-group.ca.

We apologize for the inconvenience caused to all our stakeholders.

Actions to prevent re-occurrence of this issue:

Immediate:

- Implement work-around solution
- Finalize testing of final solution and deploy

Mid-term:

- Update testing procedures to include additional test cases around the optimization process reading third-party marketplaces market data