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What is A/B Arbitration?

Model:

10G-PCIE3-8E-2S

Software:

DBL Version 5.X

Operating System:

Supported Windows and Linux releases as highlighted in the User Guide.

Information:

Note: the following information is pulled directly from the DBL Version 5.X User Guide. It is highly recommended to use the User Guide for configuration guidance.

Financial exchanges often use redundant multicast UDP feeds to disseminate pricing information. Since UDP is unreliable, the redundancy is used to greatly reduce loss of information.

A “unit” is a portion of an exchange data feed that transmits pricing information for a pre-assigned group of symbols. On each feed, every unit is assigned a set of unique multicast address/port combinations called “streams” or “channels” to disseminate redundant pricing information. A “tracked unit” is a unit for which the 10G-PCIE3-8E-2S adapter is monitoring and eliminating redundant packets.

The application or middleware is typically responsible for eliminating the redundant packets and providing a single more reliable stream of packets to the trading engine. This process is referred to as “AB Arbitration.”

While the path of UDP packets from the exchange to the 10G-PCIE3-8E-2S adapter is unpredictable, the path from the adapter to the application is reliable, so it is appropriate to eliminate redundant packets within the adapter. The reduction or elimination of redundant packets decreases traffic across the PCI bus and through host memory, improving overall system performance. The adapter does a best-effort optimization- it may not eliminate all redundant packets-yet it will only drop packets that are guaranteed to be redundant.

Revision:	Date:	Change:
1	6/23/2016	Initial Draft
2	7/20/2016	Feedback

