IBM BladeCenter HS22V delivers competitive throughput and latency with Thomson Reuters Enterprise Platform

August 17, 2011 … IBM® has announced benchmark results for the Thomson Reuters Enterprise Platform (TREP). The benchmark measured the performance of the IBM BladeCenter® HS22V server running TREP in Advanced Distribution Server (ADS) 2.1.0.L4 standard mode.

The TREP benchmark's purpose is to measure performance for a particular hardware and software platform—in this case, the IBM BladeCenter HS22V configured with a Mellanox 2-port 10Gb Ethernet Expansion Card (CFFh) for IBM BladeCenter and IBM System Networking's BNT Virtual Fabric 10GbE switch modules, and running TREP and Red Hat Linux® Server 5.5.

The tests measured throughput and latency through TREP infrastructure components, specifically the Advanced Distribution Server. Following are the results:

- **End-to-end latency test:** 500 thousand updates per second with a mean latency of less than 180 microseconds and 1.6 million updates per second with a mean latency of less than 1 millisecond

- **ADS (no fan-out) throughput:** 1.80 million updates per second

- **ADS (producer 50/50) throughput:** 4.7 million updates per second

The HS22V's ADS (no fan-out) throughput score demonstrates a 12% improvement over a previous HS22 score, and 15% to 40% improvement in latencies. (1)

These results demonstrate that this hardware and software platform can enable financial services firms to achieve faster decision making with an infrastructure that can respond quickly to changing market conditions and events in real time.

The measured configuration used the IBM BladeCenter H chassis, which contained three HS22V blades. Each blade was configured with two quad-core Intel® Xeon® X5680 3.33GHz processors, 24GB of memory, one 50GB SSD drive, two integrated Broadcom 1GbE controllers and one dual-port Mellanox ConnectX-2 EN 10GbE CFFh/mezzanine adapter, and two IBM BNT Virtual Fabric 10GbE switch modules.

See the report for a more detailed description of the configuration and the benchmark methodology:
http://public.dhe.ibm.com/eserver/benchmarks/IBM_BladeCenter_HS22V_ADS2.1.0.L4_Results_Mellanox_aug9.pdf

More information is available at the following links:

- Mellanox announcement: http://www.mellanox.com/content/pages.php?pg=press_release_item&rec_id=542

- Related IBM Redbook: http://www.redbooks.ibm.com/abstracts/tips0820.html?Open

- IBM System Networking's BNT Virtual Fabric 10GbE Switch Module:
http://www.redbooks.ibm.com/abstracts/tips0708.html

(1) See the report for the HS22 for details:
http://public.dhe.ibm.com/eserver/benchmarks/IBM_BladeCenter_HS22_RMDS6_3Result_Chelsio_120109.pdf