DWT
DEALING WITH TECHNOLOGY
Incorporating
Trading Technology Week
September 25, 2006
www.dealingwithtechnology.com

Reuters Debuts RMDS 6.0 Benchmarks

LONDON—Reuters officials say that the vendor's next-generation market data distribution platform, the Reuters Market Data System (RMDS), version 6, offers 1.8 million updates per second in an "out-of-the-box" Linux/Intel configuration.

Reuters is basing its latest performance statistics on a report by Technology Business Development Corp. (tbdCorp), which Hewlett Packard (HP) and Intel hired to test RMDS. tbdCorp specializes in real-time data management.

Officials at tbdCorp have found that by using an HP ProLiant DL380 Server fitted with two 3.0 GHz Dual-Core Intel Xeon 5160 processors running Red Hat Enterprise Linux 4.4, the performance of RMDS 6.0 could be multiplied by three to seven times compared to previous configurations.

While the 1.8 million updates per second figure is said to be "way beyond what customer can actually achieve," according to Mike Parlapiano, head of information management at Reuters, the report says that when the two cores in Intel's Xeon chip are used, that number climbs to 3.3 million updates per second.

Currently, "the high-end client gets 350,000 to 400,000 updates per second," says Peter Lankford, president of tbdCorp. Before joining tbdCorp, Lankford was senior vice president of information management solutions at Reuters, where he was in charge of the creation and market penetration of RMDS.

For RMDS clients running the HP/Intel configuration, tbdCorp officials report that RMDS will transmit 300,000 updates per second before exceeding one millisecond of latency.

tbdCorp, along with Reuters, HP and Intel, tested the system in August. The increased speed and performance of RMDS 6.0 is benchmarked against an early 2006 test produced with version 5 of RMDS running on HP servers fitted with the previous Intel DP Xeon 3.6 GHz chip with hyper-threading. The operating system has also been upgraded between the two tests with tbdCorp using Red Hat 4.0 instead of Red Hat 3.0.

tbdCorp is also working on further tests with partners such as Novell and Voltaire. "Working with Novell, tbdCorp is optimizing RMDS with Suse Linux Enterprise Real Time," Lankford says. The collaboration should lead to fewer latency outliers, according to tbdCorp.

RMDS is also optimized with Voltaire's Infiniband to further reduce latency. "Running the RMDS fan-out test in a pure Infiniband environment yields 5.9 million updates per second," says Lankford.

Nigel Woodward, director of global financial services at Intel, says that these numbers could be improved with new technologies the chip maker is currently working on. Increased speed could also result from the introduction of a new messaging standard—FIX Adapted for Streaming (Fast), says Woodward.

After similar tests, officials from Reuters rival Wombat Financial Software say they have broken the 100 microsecond barrier on an open platform using Voltaire's high performance, low-latency Infiniband switches and software, the new Suse Linux Enterprise Real Time server from Novell, and the new Dual-Core Intel Xeon processor 5100 series. Wombat, Voltaire, Novell and Intel designed and performed the test, which simulated the publishing of 50,000 messages per second from a Wombat feed handler to multiple individual consuming applications via a TCP fan-out.

Olivier Laurent