Voltaire Unified Fabric Powers HLRN Supercomputer

Combination of 20 Gigabit InfiniBand Switching and 10 Gigabit Ethernet Connectivity Delivers Superior Performance to Large-Scale Supercomputer

BILLERICA, Mass. and HERZLIYA, Israel – August 12, 2008 – Voltaire Ltd. (NASDAQ: VOLT), a leading provider of grid backbone solutions for data centers, today announced that the North German Supercomputing Alliance (HLRN, www.hlrn.de) has implemented a Voltaire unified fabric for InfiniBand, Ethernet and storage consisting of switches, gateways and software as part of an SGI® Altix® supercomputer. Known as HLRN-II, the new system is 13 times more powerful than HLRN's previous supercomputing resource.

The supercomputer system, which ranks at numbers 71 and 72 on the June 2008 TOP500 list, will significantly strengthen the competitive position of North German advanced research in diverse fields including environmental and climatic research, geological, coastal and oceanic research, the biological sciences, shipbuilding, quantum chemistry, and the engineering sciences.

The supercomputer system is shared between two German HPC sites located 155 miles apart – the Konrad-Zuse-Zentrum für Informationstechnik in Berlin (ZIB) and the Regionales Rechenzentrum für Niedersachsen in Hannover (RRZN). The two system complexes in Hannover and Berlin are closely integrated and interconnected to create a unified overall system (one-system characteristic).

"The HLRN-II represents a tremendous advance for advanced research in northern Germany," said Professor Alexander Reinefeld at the North German Supercomputing Alliance (HLRN). "The InfiniBand fabric from Voltaire plays an important role in this supercomputer because it gives us leading-edge inter-processor and I/O performance and enables the system to scale."

"The Voltaire switches enabled us to build a unified fabric using InfiniBand to connect the servers while using their 10 Gigabit Ethernet gateways to bridge together the sites at Berlin and Hannover in a seamless and high-performance manner," added Prof. Gabriele von Voigt at RRZN.

The installation features a total of 5,824 Intel® Xeon® processor cores and consists of twin SGI® Altix® ICE systems and SGI® Altix® XE 1200 cluster systems connected by 4 Voltaire Grid Director™ 2012 switches and 6 Voltaire Grid Director™ 2004 switches. The switches each offer 288 and 96 ports respectively of 20 Gigabits/second InfiniBand bandwidth and very low latency. Eight of the switches include a Voltaire 10 Gigabit Ethernet line board to seamlessly bridge the 10 Gigabit Ethernet link used for communication and data transfer between the sites in Berlin and Hannover. Overall, the HLRN installation provides more than 15.8 Terabytes (TB) of main memory and 1.15 Petabytes of SGI® InfiniteStorage storage capacity.

"HLRN can look forward to important advancements in scientific and engineering research using the SGI system with a Voltaire unified fabric," said Asaf Somekh, vice president of strategic alliances, Voltaire. "By selecting a unified fabric from Voltaire that leverages both 20 Gigabits/second InfiniBand and 10 Gigabit Ethernet in a single switching platform, HLRN gains improved performance and efficiency for their new supercomputer."