

Voltaire Scale-Out InfiniBand Fabric Accelerates South Africa's Largest Supercomputer Powered by Sun Microsystems

Voltaire 40 Gb/s Switch Helps CHPC Accelerate Critical Research in Areas of Climate Change, Energy and Healthcare

CHELMSFORD, Mass. and RA'ANANA, Israel – January 19, 2010 – Voltaire Ltd. (NASDAQ: VOLT) today announced that the Centre for High Performance Computing (CHPC) in Cape Town, South Africa has selected a Voltaire 40 Gb/s QDR InfiniBand director switch as part of its new Sun Microsystems supercomputer. The CHPC is a division of the South African Council for Scientific and Industrial Research (CSIR).

"This powerful new supercomputer supports research in pursuit of solutions to important concerns such as global warming and to finding safe and reliable energy sources, and cures for or prevention of communicable diseases," said Dr. Happy Sithole, Director, CHPC.

"The inclusion of a Voltaire InfiniBand fabric in the design provides an ultra-fast communication mechanism between the servers and the storage to dramatically speed up the performance of the applications running on the system. As such, it's anticipated that months of computing time will be reduced to weeks, days or even hours," Dr. Sithole continued.

With a peak performance of 27 teraFLOPS, the new supercomputer is the fastest in Africa and ranks among the TOP500 supercomputers in the world. It's therefore no surprise that the CHPC has chosen a Voltaire 40 Gb/s InfiniBand switch to help deliver this amazing level of performance.

The supercomputer, based on a Sun Constellation System, includes three Sun Blade 6048 Modular Systems, with 144 Sun Blade X6275 server modules using the Intel Xeon processor 5500 series, and a Sun SPARC Enterprise M9000 server with 64 SPARC64 VII quad-core processors, explained Stefan Jacobs, South and Eastern Europe (SEE) systems solution architect for Sun.

"At the front-end, CHPC is using a Sun visualization system, which allows for users to easily view 3D models of their complex data sets. We deployed a Sun Lustre Storage System consisting of 10 AMD Opteron -powered Sun Fire X4540 Open Storage systems, providing half a petabyte of data with the highest price/performance available. All of the server and storage infrastructure is connected by the Voltaire Grid Director™ 4700, a 40 Gb/s QDR InfiniBand switch," Mr. Jacobs added.

The Grid Director 4700 features 324 ports of 40 Gb/s InfiniBand connectivity, with the option to double capacity to 648 ports using Voltaire's HyperScale fabric boards; and utilises Voltaire's unique stackable architecture for building larger configurations into the hundreds and thousands of nodes, with lower latency and greater simplicity than alternative solutions.

Using Grid Director 4700 switches with HyperScale architecture, a customer can build a 1,296 node supercomputer with a fabric that delivers 20% lower latency than alternative solutions, requiring 50% fewer switch ports, 40% fewer cables and 33% less power and rack-space.

"The CHPC's new supercomputer will advance many of South Africa's most important research initiatives including alternative energy sources, weather prediction and healthcare," said Asaf Somekh, Vice President of Marketing, Voltaire. "We're pleased to be selected by CHPC and our partners Sun Microsystems and Eclipse Networks in South Africa, to deliver the scale-out InfiniBand fabric for this ground-breaking HPC system in Africa."

The entire solution was built and commissioned by Sun and its local partner Eclipse Networks. It will now be supported and maintained by Eclipse Networks, the local Sun and Voltaire partner specialising in high performance computing (HPC) in South Africa.

“The HPC market is definitely growing in South Africa placing a consistent emphasis and demand on being able to deliver both skilled and experienced resources in support of world class computing solutions. To be part of such an exciting project such as the CHPC’s supercomputer implementation is not only very exciting but every engineer’s dream. The interconnectivity performance of the Voltaire Grid Director QDR switch is phenomenal and is a critical success factor for every ‘green’ supercomputing solution,” said Nico Meintjes, Chief Procurement Officer for Eclipse Networks and Program Manager for the CHPC project.

About Voltaire

Voltaire (NASDAQ: VOLT) is a leading provider of scale-out computing fabrics for data centers, high performance computing and cloud environments. Voltaire’s family of server and storage fabric switches and advanced management software improve performance of mission-critical applications, increase efficiency and reduce costs through infrastructure consolidation and lower power consumption. Used by more than 30 percent of the Fortune 100 and other premier organizations across many industries, including many of the TOP500 supercomputers, Voltaire products are included in server and blade offerings from Bull, HP, IBM, NEC and Sun. Founded in 1997, Voltaire is headquartered in Ra’anana, Israel and Chelmsford, Massachusetts. More information is available at www.voltaire.com or by calling 1-800-865-8247.

About Sun Microsystems, Inc.

Sun Microsystems develops the technologies that power the global marketplace. Guided by a singular vision – “The Network is the Computer” -- Sun drives network participation through shared innovation, community development and open source leadership. Sun can be found in more than 100 countries and on the Web at <http://sun.com>