

Voltaire Unveils Scale-Out Ethernet Architecture Designed To Improve Data Center Networking Economics By Orders Of Magnitude

Leverages InfiniBand Expertise to Reinvent and Simplify Ethernet Networks Providing a New Networking Paradigm of Improved Performance and Scalability at Half the Price

Customers Now Have the Choice of Scale-out InfiniBand or 10 Gigabit Ethernet Switches

BILLERICA, Mass. and RA'ANANA , Israel – May 4, 2009 – Voltaire Ltd. (NASDAQ: VOLT), a leading provider of scale-out data center fabrics, today announced the company's 10 Gigabit Ethernet switching strategy designed to fundamentally improve the user experience and economics of data center networking. Based on Layer 2 core switches using Converged Enhanced Ethernet (CEE) technology that leverages many of the characteristics inherent in InfiniBand, Voltaire's scale-out Ethernet architecture enables users to benefit from a far more scalable, lower latency, and virtualized 10 Gigabit Ethernet fabric, with lower costs and power consumption and simplified management.

The new 10 Gigabit Ethernet offerings are a natural extension to Voltaire's family of 20 and 40 Gb/s InfiniBand switching platforms and software and enable customers to choose the underlying data center fabric, based on their application requirements and individual technology practices.

The detailed architecture is outlined in a new whitepaper available today, titled, "Scaling-Out Ethernet for the Data Center" www.voltaire.com/Ethernet.

"With the growth of consolidation, virtualization and cloud computing in the data center, the core of the data center network is currently undergoing an evolution of requirements with the development of new network technologies specifically for the data center," said Mark Fabbi, vice president, Enterprise Networking, Gartner Research. "These new high-end data center requirements are opening the door for innovation, causing a new category of Layer 2 core switches to emerge enabling high-capacity, scale-out fabrics to support 1000s of servers that don't require the expensive, multi-tiered architecture of days gone by."

"We are approaching our new data center design with fresh thinking and innovative ways to maximize space and cost to deliver the lowest latency and best performance to our customers," said Steve Rubinow, EVP and co-Chief Information Officer, NYSE Euronext. "Voltaire's scale-out approach to Ethernet fabrics is unique and very well-aligned with the scalable infrastructure we will deploy in our next generation global data centers."

At the center of Voltaire's scale-out Ethernet architecture are new high-density Layer 2 core switches based on CEE standards that deliver a high-performance, low-latency, low power and virtualized data center fabric. Instead of using many hierarchical switching tiers, the Voltaire approach uses fewer switches and allows greater scalability while guaranteeing higher performance, simplified management and lower costs. For a customer building a 1000 node data center, this approach delivers 10X lower latency and 4X faster core performance for half the price, using 3X less power than alternative solutions.

“The current multi-tiered approach to data center Ethernet networking is expensive and outdated, lacks innovation and encourages vendor lock-in,” said Ronnie Kenneth, chairman and chief executive officer, Voltaire. “With Voltaire’s unique scale-out approach to Ethernet, we’re simplifying and flattening the network to improve data center networking economics by orders of magnitude. Together with our server OEM partners, we’re bringing new value to the customer that can translate into millions of dollars in savings for a new data center build-out.”

“In addition, Voltaire’s heritage of software innovation for InfiniBand will extend to our Ethernet offerings to enhance their performance and ease of management,” Mr. Kenneth added.

- **Linearly Scalable** – The Voltaire scale-out Ethernet fabric maintains its high performance, low costs and ease of management even when deployed in very large setups consisting of thousands of nodes.
- **Efficient** – The Voltaire scale-out Ethernet fabric’s optimized design uses high-density, low latency, energy-efficient and low cost Layer 2 non-blocking switches.
- **Converged** – One fabric can run LAN, IPC, and storage (including FCoE) traffic simultaneously with guaranteed service attributes and dynamic congestion management.
- **Virtualized and Service Oriented** – Voltaire’s virtualization-aware scale-out Ethernet fabric provides application- and service-driven fabric monitoring and SLA enforcement.
- **Open and Standard** – The Voltaire scale-out Ethernet fabric supports industry-standard servers, third party switches, management and virtualization solutions.

“Scale-out enterprise customers exploring 10 Gigabit Ethernet want higher performance at a lower cost,” said Ed Turkel, manager of product marketing, Scalable Computing and Infrastructure, HP. “Voltaire’s new scale-out Ethernet architecture and Layer 2 core switches, coupled with HP server and blade platforms, remove previous cost and performance barriers that prohibited widespread adoption of 10 Gigabit Ethernet.”

Voltaire Scale-out Switching and Software Today and Tomorrow

Today, Voltaire provides high-performance InfiniBand fabrics for the world’s largest supercomputers, the fastest financial trading platforms, and design and engineering clusters for global manufacturing, energy, life sciences and media companies. The company began shipping 40 Gb/s InfiniBand platforms in December and its new director-class 40 Gb/s InfiniBand switch will be available in late Q2 2009. With Voltaire’s new 10 Gigabit Ethernet offerings, a broader array of end users with less rigid performance requirements than those addressed by InfiniBand can now benefit from a more scalable and high-performance Ethernet fabric.

Voltaire’s scale-out Ethernet architecture initiative has been underway for more than 18 months and uses a shared resource and development model. The company has a robust, detailed InfiniBand switching roadmap and many existing and future software products have been designed to work on both InfiniBand and Ethernet. Voltaire is leveraging its close partnerships with server OEMs as the main distribution channel for the new 10 Gigabit Ethernet offerings.

“Voltaire’s scale-out approach to 10 Gigabit Ethernet is well-aligned with IBM’s cloud networking and next generation data center solutions,” said Alex Yost, vice president, IBM System x and BladeCenter. “The combination of IBM BladeCenter, iDataPlex and rackmount servers and a Voltaire Ethernet fabric will enable virtualized environments that address the new performance, scalability and efficiency requirements of our data center clients.”