



## Mellanox Reduces Storage Backup Cost

*Low Cost InfiniBand Storage Platform Drastically Reduces Oracle® Database 10g Backup and Recovery Costs*

ORLANDO, FLORIDA - October 25, 2004 - Storage Networking World - Mellanox® Technologies Ltd, the leader in performance business computing interconnects, today announced a native InfiniBand storage platform that can significantly cut Oracle® Database 10g backup and restore costs and gain in operational time when compared to mid-range Fibre Channel storage solutions.

Mellanox tested Oracle Database 10g backup and restore operations on the MTD1000 - a low cost native InfiniBand storage development platform that is based on commodity server components and serial ATA (SATA) disk drives. This storage platform is designed to speed time to market for storage OEM and integrators planning to capture market share in price/performance sensitive enterprise storage applications.

### **Oracle Backup and Recovery with InfiniBand Storage**

Mellanox conducted a series of Oracle Database 10g backup and recovery operations using the Recovery Manager and Automatic Storage Management features of the database, respectively. The InfiniBand storage platform running on an off-the-shelf version of Oracle Database 10g outperformed both a mid-range Fibre Channel storage platform as well as a lower cost Fibre Channel I/O and SATA disk based storage platform.

In low level tests using the IOMETER benchmark, the native InfiniBand storage solution delivers over 800MB/s throughput to the disks - more than four times the measured performance of 2Gb/s Fibre Channel platforms. This throughput performance advantage translates to significantly reduced backup and restore times – slicing these in half as compared to Fibre Channel solutions

costing considerably more. This leap forward in storage performance is directly attributed to InfiniBand's 10Gb/s data throughput, remote direct memory access (RDMA), and hardware transport capabilities.

“Record backup and recovery benchmarks utilizing native InfiniBand storage solutions extends the value proposition for using InfiniBand to interconnect server clusters simply and efficiently to large volumes of storage in the data center,” stated Eyal Waldman, CEO, Mellanox Technologies. “With broad industry support and a well defined roadmap to 120Gb/s, Mellanox's InfiniBand solutions will continue to lead the price/performance curve for both, clustered server and storage interconnect solutions.”

“We are pleased to partner with Mellanox to provide a platform for low cost InfiniBand storage development for our customers,” said Juan Loaiza, vice president of Systems Technologies, Oracle Corporation. “A typical database configuration has very powerful hosts on one side of the network, and very fast disks on the other side. In between is a network whose limited bandwidth can create a bottleneck for sequential workloads such as backup and table scans. InfiniBand holds the promise of greatly increasing the bandwidth of the network, and thereby improving the overall performance of database workloads.”

### **InfiniBand Storage Platforms**

Mellanox's MTD1000 InfiniBand storage development platform is based on a Supermicro storage server and enterprise-class WD Raptor? SATA drives from Western Digital. The 3U Xeon based enterprise storage platform offers redundant power supplies and fans, integrated dual port InfiniBand PCI Express Host Channel Adapter, and up to 3.75TBs of storage. The storage platform delivers over 800MB/s of throughput to the drives through a single InfiniBand 10Gb/s link. The development platform is available to OEMs and value added resellers for \$11,999 and comes standard with 1.1TB's of storage and InfiniBand target driver software.

“With the combination of Mellanox's InfiniBand HCAs and Supermicro's SuperServer storage solutions, our customers can build the highest possible performance with no single points of failure to the storage media. Supermicro server building blocks are also recognized in the industry as the most compatible for Linux and Microsoft O/S.” said Hermann von Drateln, Director Business

Development of Supermicro. “The end result is a highly reliable, cost-aggressive platform that provides unmatched value in mission-critical storage applications.”

“Mellanox’s InfiniBand I/O showcases the enterprise performance capabilities of the WD Raptor line of Serial ATA disk drives,” stated Hubbert Smith, director of marketing - enterprise products for WD. “The combination of these technologies offers a cost-effective alternative to data centers using expensive Fibre Channel and SCSI disk storage solutions without sacrificing any performance or reliability.”

### **InfiniBand Unifies the Data Center**

Mellanox InfiniBand technology provides a high-bandwidth, low-latency 10Gb/s fabric that interconnects both server and storage nodes. A unified InfiniBand data center is the cost-effective alternative to the complexities and high-cost associated with managing separate compute and storage area networks. At the same time, InfiniBand provides industry leading server-to-server and server-to-storage performance required to realize the true benefits of grid computing.

### **About InfiniBand**

InfiniBand is the only 10 Gb/sec ultra low latency clustering, communication, storage and embedded interconnect in the market today. InfiniBand, based on an industry standard, provides the most robust data center interconnect solution available with reliability, availability, serviceability and manageability features designed from the ground up. These features greatly reduce total cost of ownership for the data center. Low cost InfiniBand Interconnect solutions provide 10Gb/sec RDMA transfers delivering up to 25 times the performance of Ethernet, offer unprecedented performance and density, and outperform proprietary interconnects at a fraction of the cost. With 30 Gb/sec products shipping currently, InfiniBand is at least a generation ahead of competing fabric technologies today and in the foreseeable future.

### **About Mellanox**

Mellanox delivers field-proven interconnect solutions for communications, storage and compute clustering that are changing the shape of both business and technical computing. As the leader of industry-standard, InfiniBand-based silicon and system solutions, Mellanox provides a worry-free

interconnect fabric for data centers and technical compute clusters which demand increased efficiency and improved return on investment. With all first tier server vendors and leading storage vendors providing products based on three generations of InfiniBand technology, Mellanox is the driving force behind the most cost-effective, highest performance interconnect solutions available. Convergence in today's data center environment is driving companies worldwide to put in place a cost-sensitive, unified interconnect that can support communications, storage and compute clustering. This convergence within the data center requires tremendous performance and efficiency from the interconnect fabric. Addressing this challenge, Mellanox offers solutions that improve, both the utilization and performance of clustered systems, and significantly reduce total cost of ownership - delivering supercomputing performance at business computing prices. The company has strong backing from corporate investors including Dell, IBM, Intel Capital, Sun Microsystems, and Vitesse as well as, strong venture backing from Bessemer Venture Partners, Raza Venture Management, Sequoia Capital, US Venture Partners, and others. Mellanox has been recognized with awards from Computerworld, Network Computing, Red Herring, and Upside magazines as a key emerging technology company. The company has major offices located in Santa Clara, CA, Yokneam and Tel Aviv, Israel.

For more information visit Mellanox website at [www.mellanox.com](http://www.mellanox.com)

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