



Communiqué de presse

## **Sun Microsystems Unveils Fully Integrated, High Performance Flash Storage Arrays Designed to Accelerate Databases and Enterprise Applications**

**New Fully Integrated Flash Arrays Increase Oracle and MySQL Database Performance By Up to a Factor of 10, with Up to 80% Reduction in Operating Costs**  
SANTA CLARA, Calif. October 12, 2009 Sun Microsystems Inc. (NASDAQ: JAVA) today announced a significant leap forward in the industry with the introduction of new [Sun Storage F5100 Flash Array](#) that extends Sun's flash portfolio with the latest innovation that offers customers the best way to scale storage performance. The first enterprise server and storage company to bring fully-integrated Flash-based storage with Flash-optimized software to the enterprise, Sun's new flash array is designed to accelerate Oracle and MySQL database workloads and optimize storage architectures for higher performance at lower cost.

The Sun F5100 Flash Array features up to two terabytes of solid-state Flash capacity and an unprecedented 1.6 million read and 1.2 million write IOPS performance in a single rack unit (1.75 inches) - yet consumes just 300 watts. This new high-performance, super-efficient storage array delivers 1.6 million IOPS of performance, which is comparable to 3,000 enterprise hard disk drives that span over 14 data center racks and consume more than ten times the energy (40,000 watts.)

Sun has achieved world-record performance of 12.8 gigabyte-per-second of I/O bandwidth from one Sun F5100 array. Each Sun F5100 array is one rack-unit in height and can be zoned and connected to up to 16 separate hosts so that a single F5100 can be used by more than one application environment. Included unified management and monitoring software provides a single storage management window across a wide range of operating systems.

"Today's announcements build on Sun's strategy to lead a new storage hierarchy driven by flash technology to accelerate I/O throughput. No other vendor today is shipping fully-integrated flash-based hardware and software that leverages a world-class operating system to deliver breakthrough performance and value to our customers," said John Fowler, executive vice-president, Systems Group, Sun Microsystems.

### **Sun Servers with FlashFire Technology Deliver World Record Performance Across Prominent Enterprise and High-Performance Computing Workloads**

The Sun Storage F5100 Flash Array enabled the Sun SPARC Enterprise M4000 server to produce a world record result on the Oracle PeopleSoft Enterprise Payroll 9.0 N.A. application benchmark that represents typical online transaction processing workloads for processing employee payroll. The high-performance, high-density Sun Storage F5100 Flash Array dramatically improved I/O performance for this application with ten times better latency versus traditional fibre channel disks while,

at the same time, work with Oracle Database 11g to process up to 250,000 employee payroll checks.

Additionally, the Sun Storage F5100 Flash Array worked with the Sun Fire X4270 server to deliver the best performance on a suite of [Mechanical Computer-Aided Engineering \(MCAE\)](#) application tests that included MSC/NASTRAN, Abaqus/Standard and ANSYS 12.0. The combination of Sun Flash storage and server technologies delivered a world record result on Abaqus/Standard and demonstrated between 65% and up to 2x improvement on various subsets of ANSYS 12.0 BMD and MSC/NASTRAN compared to the internal SAS disks configured with RAID0. These applications are based on the finite element method of analysis (FEA) and represent the more I/O intensive group of MCAE workloads making Sun Storage F5100 Flash Array a natural fit.

For more information on these leading benchmarks please visit:

<http://sun.com/F5100>. Look for additional benchmark announcements for Sun Storage F5100 Flash Array during Oracle Open World (October 12-15, 2009).

"San Diego Supercomputer Center (SDSC) has been evaluating the F5100 Flash Storage array as a high performance SamQFS metadata target, which sits at the core of our archiving services and hosts well over one hundred million files.

Performance improvement of 2.5 to four times was demonstrated for file creation and metadata scans, such as listing and backups. Further testing will be done using the Sun Storage F5100 as a Lustre metadata target, high speed storage pool in Lustre 2.0 for user checkpoint data, Oracle database storage device and out-of-core storage device on an HPC cluster," said Don Thorp, Production Systems, San Diego Supercomputer Center.

#### **Flash Performs Best When Integrated with Software**

Getting the best performance from these and other Flash devices is simplified through the use of Sun's ZFS Hybrid Storage Pools feature included in the Solaris Operating System (OS). The built-in automated tuning and extra resiliency features make it a popular choice for many customers.

"Oracle customers are accustomed to getting great value from their Oracle Database deployments and are looking for best-in-class products to optimize response time from their database applications," said Andy Mendelsohn, senior vice-president, Database Group, Oracle. "Oracle and Sun Fire systems running Solaris OS are proven to deliver world-class reliability, scalability and performance for enterprise customers and we look forward to extending this success into this new family of FlashFire-based storage products."

To learn more about Sun's Flash Storage solutions, please see [www.sun.com/flash](http://www.sun.com/flash)

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