



Product News Highlights:

[Information Week: Oracle, Sun Claim Fastest Database, 13 October 2009](#)

"Oracle and Sun aired the results of their TPC-C benchmark Sunday, the opening day of the Oracle OpenWorld."

"The f5100 flash array can perform 1.6 million read and 1.2 million write I/O operations per second, and is designed to accelerate Oracle and MySQL database workloads, according to Sun. With it, the Oracle/Sun Exabyte machine achieved 7.7 million TPC-C transactions a minute."

"It was the first use of a flash storage device in a TPC benchmark."

[ZDNet: Sun introduces 2TB flash storage array, 13 October 2009](#)

"Sun has unveiled a solid-state flash-based storage array with a capacity of up to 2TB, claiming an industry high for the product's performance."

"The Sun Storage F5100 Flash Array, introduced on Monday at the Oracle OpenWorld conference in San Francisco, can read up to 1.6 million input/output operations per second (IOPS) and write up to 1.2 million IOPS, according to Sun. The array delivered I/O bandwidth of 12.8GBps, in what the company claims is the fastest performance to date for an SSD array."

"The unit takes up a single 1.75-inch rack unit and consumes 300 watts, according to the company. In that setup, the device's performance is comparable to 3,000 enterprise hard disk drives spanning more than 14 racks and consuming more than 40,000 watts of power, Sun said. More details about the F5100 benchmark results are available on Sun's website."

"The high speed of flash-based storage is useful for transaction-heavy operations such as processing employee payroll, which was the basis of the benchmark, Sun said. In addition, the San Diego Supercomputer Center (SDSC) is evaluating the storage system for its archiving services, which host more than 100 million files, according to Sun."

[IT Pro: Sun focuses on flash based storage, 13 October 2009](#)

"Sun is bringing high-performance flash storage arrays to market this week. The Sun Storage F5100 Flash Array has integrated flash-based storage and optimised software to speed up database processes for MySQL and Oracle."

"Offering up to 2TB of solid state flash capacity, Sun claims the array has green credentials, saying it can perform 1.6 million read and 1.2 million write IOPS in a single rack for just 300 watts."

[InformationWeek: Sun Unveils 2 TB Flash Storage Array, 12 October 2009](#)

"Sun Microsystems on Monday introduced a flash-based storage array that may be the highest-performing solid-state drive array to date."

"The new Sun flash array according to Sun. If such performance levels are accurate, then the storage device may be the highest performing flash-based array to date."

"Sun offered some impressive benchmarks based on the use of the F5100 with its Sun Fire X4270 server. The hardware is currently under evaluation by the San Diego Supercomputer Center as part of its archiving service, which hosts more than 100 million files."

"The higher performance and lower power usage of SSDs have attracted the attention of corporations, which have found the significantly higher cost of the devices over traditional HDDs justified for some data center applications."

[Softpedia: Computer Hardware review on Gadget Finder/Softpedia, 13 October 2009](#)

"Dubbed the F5100, sounds like a Ferrari . . ."

"If you already have pretty fast computers, making them even faster can be quite a remarkable and sometimes futile attempt. This is why after a certain level, all you can do is upgrade bits and pieces and sometimes get something that's good enough to be announced. This seems to be exactly Sun Microsystems' plan, since it has decided to offer fully integrated Flash Storage Arrays that seek to increase databases and enterprise applications."

"I'll leave the ending with Don Thorp, Production Systems, San Diego Supercomputer Center, "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."

[The Register: Sun, Fujitsu crank Sparc64-VII clocks, 13 October 2009](#)

"Sun has unveiled a solid-state flash-based storage array with a capacity of up to 2TB, claiming an industry high for the product's performance."

"The F5100 model has up to 1.92TB of single-level cell NAND flash and comes as a 1U rackmount shelf. It has 64 SAS lanes (16 x 4-wide ports), 4 domains and SAS zoning, and can perform 1.6m read IOPS and 1.2M write IOPS, with a bandwidth of 12.8GB/sec."

"Sun says the speed and capacity of this product is the best to date."

"Sun positions this as a database accelerator for Oracle and MySQL. The unit can be zoned into 16 partitions, one for each of up to 16 hosts. The device can form part of a Sun ZFS hybrid storage pool, embracing solid state and hard disk drives. It is managed through StorageTek Common Array Manager Software, and protected by a super capacitor instead of by a battery backup system. If power fails then a capacitive energy system flushes the DRAM to flash and prevents data loss."

"The 2.88 GHz version of the Sparc64-VII processors have also been equipped with a new memory controller, according to Sun and Fujitsu, which boosts throughput on systems with memory-intensive workloads. The clock speed bump alone should be worth 14.3 per cent more oomph, but Sun said in a statement that the newer chips offered "up to 25 per cent" more performance...."

[eWeek: Sun Fujitsu Unveil New SPARC64 Chips as Oracle Challenges IBM, 13 October 2009](#)

"The new quad-core SPARC64 processors, announced Oct. 13, provide mainframe-class computing at a lower cost than IBM technologies, according to John Fowler, executive vice president of Sun's Systems Group."

[The Register on 10/09 Solaris Update, 12 October 2009](#)

"A lot of the tweaks in the 10/09 update to Solaris 10 have to do with storage. The 64-bit version of the Solaris 10 operating system can now support 2TB disk drives for booting the OS; with the prior Solaris 10 releases, the maximum boot drive size was 1TB."

"The Zettabyte File System, still one of the best pieces of code Sun has brought to market and something that the company has been trying to capitalize on for years, can now designate flash-based storage as a cache for ZFS pools."

Additional Resources:

[Sun's OOW online press kit](#)

New Sun Product Announcements:

- [1\) Sun Microsystems Releases New Versions of Role Manager and Directory Server Enterprise Edition- announced 10/08](#)
- [2\) Sun Microsystems Unveils Fully Integrated, High Performance Flash Storage Arrays Designed to Accelerate Databases and Enterprise Applications- announced 10/12](#)
- [3\) Sun Announces New GlassFish Communications Server and Key Customer Wins Cedar Point Communications and Malden Labs Choose Sun for Next-Generation Network Platforms- announced 10/12](#)
- [4\) Sun Microsystems and Fujitsu Boost SPARC Enterprise Servers with New SPARC64 Processors- announced 10/13](#)
- [5\) Sun Microsystems Adds High-Performance Storage Array to Industry-Leading Disk Portfolio- announced 10/13](#)
[\(note: this was announced more in support of SNW rather than OOW... but it's another product that was covered this week\)](#)
- [6\) Sun Releases New Update for Solaris 10 Operating System- announced 10/08](#)