

IBM publishes leadership 4-processor score for SPECvirt_sc2010 benchmark

IBM System x3850 X5 demonstrates leadership performance for virtualization applications

November 30, 2011 ... IBM® continues to deliver leadership performance on the SPECvirt_sc™2010 benchmark with the publication of the overall highest score ever achieved by a system using 4 processors. The IBM System x®3850 X5 server delivered an overall performance score of SPECvirt_sc2010 4,603 @ 282 VMs. SPECvirt_sc2010 is the first-generation SPEC® benchmark for evaluating the virtualization performance of datacenter server consolidation.

The x3850 X5 was configured with the Intel® Xeon® Processor E7-8870 (2.40GHz with 30MB L3 cache per processor—4 chips/40 cores/10 cores per chip), 1TB of memory, 384 disk drives (73GB). The x3850 X5 ran Red Hat Enterprise Linux® 6 and Kernel-based Virtual Machine (KVM) hypervisor. (1)

The x3850 X5's score of SPECvirt_sc2010 4,603 @ 282 VMs easily beats all other 4-processor scores published so far. Notably, the x3850 X5's score is 18% higher than the similarly configured HP DL580-G7's score of 3,894 @ 240 VMs. (2)

The x3850 X5—with 282 VMs and 40 processor cores—has demonstrated that KVM can host 7.05 VMs per processor core on this benchmark, which is the highest number of VMs per core of any SPECvirt_sc2010 publication to date.

The x3850 X5 server leverages fifth-generation IBM Enterprise X-Architecture®, delivering innovation with enhanced reliability and availability features to enable optimal performance for databases, enterprise applications, and virtualized environments. The x3850 X5 is a versatile 4-socket, 4U rack optimized scalable enterprise server that supports up to 2TB of memory and up to 3TB of memory with the optional IBM MAX5 for System x. The x3850 X5 offers up to 8-socket (80-core) SMP operations with powerful 6-, 8- and 10-core Intel Xeon MP processors and up to 6TB of system memory in an 8-socket (80-core) complex with the optional IBM MAX5 for System x. The MAX5 is a scalable, 1U, memory expansion drawer that provides an additional 32 DIMM slots with a memory controller for added performance and a node controller for x3850 scalability.

Result referenced is current as of November 30, 2011. This SPECvirt_sc2010 result has been accepted by SPEC and is posted at http://www.spec.org/virt_sc2010/results/. View all results for SPEC benchmarks at <http://www.spec.org/>.

(1) The IBM System x3850 X5 model as configured for this benchmark is generally available.

(2) Statement of comparison based on highest-performing 4-processor systems currently shipping. HP DL580-G7 (KVM, Red Hat Enterprise Linux 6.1. View the report for this result at: http://www.spec.org/virt_sc2010/results/res2011q3/virt_sc2010-20110725-00034-perf.html

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