

SPECvirt_sc2013 Benchmark Result for System x3650 M5

Performance Benchmark Result (withdrawn product)

*Lenovo System x3650 M5 demonstrates x86 leadership enterprise class performance for throughput and energy efficiency for virtualization environments with a **total of three #1 SPECvirt_sc2013 results**.*

May 4, 2016... Lenovo delivers industry-leading server consolidation performance on the SPECvirt_sc2013 virtualization benchmark with the publication of the world-record 2-socket SPECvirt_sc2013 scores for x86 platforms.



The Lenovo System x3650 M5 delivered the following overall SPECvirt_sc2013 world-record performance score for 2 socket x86 platforms:

- **SPECvirt_sc2013 2343 @ 132 VMs**

With high performance and large capacity internal storage subsystem, coupled with the energy efficient platform architecture, the Lenovo System x3650 M5 delivered **two world record scores for server energy efficiency**. Lenovo System x3650 M5 achieved world record server performance per watt and world record total system (including storage) performance per watt scores of the following:

- **SPECvirt_sc2013_ServerPPW 4.196 @ 132 VMs**
- **SPECvirt_sc2013_PPW 4.196 @ 132 VMs**

SPECvirt_sc2013 is the second-generation SPEC benchmark for evaluating the virtualization performance of datacenter server consolidation (SPEC VIRT), including enterprise class workloads such as virtualized SMP application server VMs and SMP database VMs, as well as dynamic workload levels across many workload types and VM instances.

The Lenovo System x3650 M5 server was configured as follows:

- Intel Xeon Processor E5-2699 v4 (2.2 GHz with 55 MB L3 cache per processor: 2 chips/ 44 cores/ 22 cores per chip)
- 512 GB of DDR4 memory
- Two ServeRAID M5210 SAS/SATA Adapters each with 2GB Cache/RAID 5 upgrade
- Two Intel X520 Dual Port 10GbE SFP+ Ethernet adapters.
- Red Hat Enterprise Linux 7.2 using the Kernel-based Virtual Machine (KVM) hypervisor.

Optimized for big data and analytics, cloud computing, and business-critical enterprise workloads, the Lenovo System x3650 M5 two-socket 2U rack server offers world-class performance and industry-leading reliability. It belongs to Lenovo's broad enterprise portfolio that spans entry rack and tower servers to four and eight socket mission critical servers.

Lenovo servers, including the x3650 M5, have consistently achieved the highest reliability of all x86 servers in the industry. Predictive Failure Analysis and light path diagnostics facilitate easy serviceability and reduced downtime and costs. Lenovo XClarity, a best-in-class enterprise tool, helps simplify and centralize discovery, monitoring, configuration, alert handling and other management functionality over the servers' lifecycle.

In addition, the x3650 M5 supports open industry standards, such as operating systems, networking and storage fabrics, virtualization, and system management protocols, to fit easily within existing and future data center environments.

Results referenced are current as of May 4, 2016.

Performance result summary available at

http://www.spec.org/virt_sc2013/results/res2016q2/virt_sc2013-20160419-00049-perf.html

Energy efficiency system + storage performance per watt result available at

http://www.spec.org/virt_sc2013/results/res2016q2/virt_sc2013-20160419-00049-ppw.html

Energy efficiency server performance per watt result available at

http://www.spec.org/virt_sc2013/results/res2016q2/virt_sc2013-20160419-00049-ppws.html

To view all SPECvirt_sc2013 performance results visit the SPEC results page at

http://www.spec.org/virt_sc2013/results/specvirt_sc2013_perf.html

Related product families

Product families related to this document are the following:

- [2-Socket Rack Servers](#)
- [SPECvirt Benchmark Results](#)

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