

Lenovo Posts Three World Record SPECvirt_sc2013 Benchmark Results with ThinkSystem SR650 Performance Benchmark Result (withdrawn product)

November 8, 2017 ... Lenovo has published three world-record two-processor (2P) performance results for the SPECvirt_sc2013 benchmark, including performance/watt results. The SPEC VIRT benchmark suites are used to measure performance and energy efficiency of virtualized platforms.

These benchmark suites are targeted for use by hardware vendors, virtualization software vendors, application software vendors, datacenter managers, and academic researchers.

The ThinkSystem SR650 server delivered the following overall SPECvirt_sc2013 world-record performance scores for 2-socket platforms:



- **SPECvirt_sc2013 3376 @ 189 VMs**
- **SPECvirt_sc2013_ServerPPW 4.792 @ 179 VMs**
- **SPECvirt_sc2013_PPW 4.792 @ 179 VMs**

The SR650 was configured as follows:

- Performance score (3376 @ 189 VMs) used the Intel® Xeon® Platinum 8180 processor (2.5 GHz with 38.5 MB L3 cache per processor: 2 chips/56 cores/28 cores per chip)
- Performance/Watt configuration (4.792 @ 179 VMs) used the Intel® Xeon® Platinum 8176 processor (2.1 GHz with 38.5 MB L3 cache per processor: 2 chips/56 cores/28 cores per chip)
- 768 GB of DDR4 memory
- Two ThinkSystem RAID 930-8i-2GB 12Gb SAS/SATA Adapters
- Two Intel X710-DA2 10Gb 2 Port SFP+ Ethernet Adapters
- SUSE Linux Enterprise Server 12 SP2 using the Kernel-based Virtual Machine (KVM) hypervisor

This benchmark result can be found at:

- [SPECvirt_sc2013 result](#)
- [SPECvirt_sc2013_ServerPPW result](#)
- [SPECvirt_sc2013_PPW result](#)

Results referenced are current as of November 8, 2017. To view all SPECvirt_sc2013 results, visit https://www.spec.org/virt_sc2013/results/specvirt_sc2013_perf.html

About the ThinkSystem SR650

For medium to large enterprises, and managed and cloud service providers, Lenovo ThinkSystem SR650 is the optimum 2U, two-socket server—the most widely used server type worldwide. It's engineered to deliver high performance with 205W CPUs, low-latency NVMe drives, and high-power GPUs.

With Lenovo's history of reliability, the highly flexible and configurable SR650 is the ideal platform for hyper-converged infrastructure (HCI) or software-defined storage (SDS). It provides a solid foundation for:

- Transforming physical resources into services, using validated designs for hybrid cloud
- Performing analytics on streaming data, using validated designs for Big Data
- Increasing productivity of virtualized transactional systems, using validated designs for OLTP databases.

Lenovo XClarity Controller is an all-new hardware embedded management engine common in every ThinkSystem server. XClarity Controller features an uncluttered graphical user interface, industry standard Redfish-compliant REST APIs, and enables booting in half the time of prior generation servers, with up to 6x faster firmware updates.

Lenovo XClarity Administrator is a virtualized application that centrally manages ThinkSystem servers, storage, and networking. Via reusable patterns and policies, it ramps up and scales infrastructure provisioning and maintenance. It serves as a central integration point to extend your data center management processes to physical IT. Running XClarity Integrators in external IT applications, or integrating through REST APIs, helps you further speed services provisioning, streamline IT management, and contain costs.

About SPECvirt

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.

Learn more

To learn more about power-efficient solutions for virtualization applications, please contact your Lenovo Sales Representative.

To find out more about SPEC, visit <https://www.spec.org>

To learn more about the Lenovo ThinkSystem SR650 server, visit the [SR650 product web page](#).

Related product families

Product families related to this document are the following:

- [2-Socket Rack Servers](#)
- [SPECvirt Benchmark Results](#)
- [ThinkSystem SR650 Server](#)

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