

ThinkSystem SR860 V3 Sets 2 World Records with New VMmark Benchmark Result

Performance Benchmark Result

Lenovo has published a new VMmark benchmark result that has set two world records. The result has been achieved with a configuration using two identically configured, powerful Lenovo ThinkSystem SR860 V3 servers. The benchmark result is:

- The world's #1 VMmark 4 result for 4-Socket Servers in a Matched Pair configuration
- The world's best VMmark 4 result on Intel processors

The VMmark benchmark is designed to enable customers to objectively measure and compare the performance and scalability of various virtualization platforms.

The ThinkSystem SR860 V3 server achieved the following VMmark 4.0.1 score (1):

- **3.54 @ 4 Tiles**



This result is:

- The first and highest 4-Socket Server Matched Pair VMmark 4 results ever published
- The first VMmark 4 result ever published using Intel Xeon processors

The two ThinkSystem SR860 V3 servers achieved this record level of virtualization performance using the following configuration:

- Two Lenovo ThinkSystem SR860 V3 servers configure as system under tests (SUTs), each with:
 - 4x Intel Xeon Platinum 8490H 60-core processors at 1.9GHz (total 4 processors, 240 cores, 480 threads)
 - 8 TB of Lenovo TruDDR5 memory
 - VMware ESXi 8.0 Update 3, Build 24022510
 - 2 total hosts, 8 total sockets, 480 total cores
- Four Lenovo ThinkSystem SR665 V3 servers configured as client hosts, each with:
 - 2x AMD EPYC 9654 96-core processors at 2.4 GHz (total 2 processors, 192 cores, 384 threads)
 - 1.5 TB of Lenovo TruDDR5 memory
 - VMware ESXi 8.0 Update 3, Build 24022510
- One Lenovo ThinkSystem SR655 server configured as server management host:
 - VMware ESXi 8.0 Update 3, Build 24022510
 - VMware vCenter Server 8.0 Update 3b, Build 24262322
- Four Lenovo ThinkSystem SR665 servers and one Lenovo ThinkSystem SR655 server were all configured as external Fibre Channel targets:

- SLES15 SP5 Linux 5.14.21-150500.53-default kernel
- Attach to the SUTs using a Fibre Channel switch

Results referenced are current as of November 12, 2024.

To view all VMmark results, visit <https://www.vmware.com/products/vmmark/results4x>.

(1) The total solution availability for this VMmark benchmark result can be found at: <https://www.vmware.com/docs/2024-11-12-Lenovo-ThinkSystem-SR860V3>

About the ThinkSystem SR860 V3

The Lenovo ThinkSystem SR860 V3 mission-critical server provides the speed and reliability you require today with the scalability and workload versatility you'll need to manage the explosive growth of data for tomorrow. Purpose-built to deliver affordable scalability in an industry-standard x86 platform, the SR860 V3 is ideal for mission critical workloads such as SAP HANA in-memory computing, transactional databases, analytics, big data, and enterprise resource planning tasks.

The Lenovo ThinkSystem SR860 V3 is a 4-socket server that features a 4U rack design, providing technology advances, including 4th Gen Intel® Xeon® Scalable processors, 4800 MHz DDR5 memory, large internal storage, and PCIe Gen 5 slots with support for up to eight high-performance GPUs, offering considerable adaptability to match system configurations to projected workloads. The system has the capability to scale from two to four 4th Gen Intel® Xeon® Scalable processor family CPUs that offers a simple “pay as you grow” upgrade for both processors and memory, resulting in greater system performance to handle growing next-generation workloads.

Server reliability, availability, and serviceability (RAS) are crucial issues for modern enterprise IT shops that deliver mission-critical applications and services, and application delivery failures can be extremely costly per hour of system downtime. Intel Xeon Scalable processors running on ThinkSystem servers continue to be at the top of the industry in regards to RAS features. For further information on the importance of RAS and a comprehensive list of the key RAS features of the Lenovo ThinkSystem servers with Intel Xeon Scalable processors, read [RAS Features of the Lenovo ThinkSystem Intel Servers](#) .

About VMmark

The VMmark benchmark is designed to measure the performance and scalability of virtualization platforms using workloads representative of the highly scalable and complex applications commonly found in the data center. VMmark is used to compare the performance of different hardware platforms and configurations.

Customers implementing or evaluating virtualization platforms use VMmark for comparing performance and scalability of various server platforms and storage solutions, making appropriate hardware choices, and for measuring platform performance on an ongoing basis.

Learn more

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

To find out more about VMmark4, visit <https://www.vmware.com/products/vmmark>

To learn more about the Lenovo ThinkSystem SR860 V3 server, visit the SR860 V3 product web page: <https://www.lenovo.com/us/en/p/servers-storage/servers/mission-critical/thinksystem-sr860-v3/7d931000na>

Related product families

Product families related to this document are the following:

- [4-Socket Rack Servers](#)
- [ThinkSystem SR860 V3 Server](#)
- [VMmark Benchmark Results](#)

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