

ThinkSystem SR665 V3 Sets World Record with New VMmark 3.1.1 Benchmark Result

Performance Benchmark Result

Lenovo has published a new VMmark 3 benchmark result that has again set the record for two-socket matched-pair performance for VMmark 3.

The VMmark 3 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.



The ThinkSystem SR665 V3 server achieved the following score (1):

- **40.66 @ 42 Tiles**

This result is the highest VMmark performance result ever published for AMD Genoa systems with 192 cores:

- 88.4% faster than the previous generation system (2)
- 0.4% faster than the Dell PowerEdge R7625 (3)

The SR665 V3 achieved this record level of virtualized data center performance using the following configuration:

- 2x AMD EPYC 9654 96-core processors at 2.4 GHz (2 processors, 192 cores, 384 threads)
- 6 TB of Lenovo TruDDR5 memory
- VMware ESXi 8.0 GA Build 20513097
- VMware vCenter 8.0 U1, Build 21560480

This result also relied on the Lenovo ThinkSystem DM7100F Unified All Flash Storage and DB Series of Fibre Channel SAN switches for storage, configured as follows:

- 2x ThinkSystem DM7100 Controllers
- 2x ThinkSystem DM240N 2U24 NVMe Expansion Enclosures
- 24x NVMe SSDs
- 1x Lenovo ThinkSystem DB Series FC SAN Switch

Results referenced are current as of June 13, 2023.

To view all VMmark 3.x results, visit <https://www.vmware.com/products/vmmark/results3x.html>.

(1) The total solution availability for this VMmark benchmark result can be found at: <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vmmark/2023-06-13-Lenovo-ThinkSystem-SR665V3.pdf>

(2) 2x Lenovo ThinkSystem SR665 each with two AMD EPYC 7763 64-core processors at 2.45 GHz (2/128/256). Test configuration contains 2 Total hosts, 4 total sockets, 256 total cores. Result details are from: <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vmmark/2021-05-04-Lenovo-ThinkSystem-SR665.pdf>

(3) 2x Dell PowerEdge R7625 each with two AMD EPYC 9654 96-core processors at 2.4 GHz (2/192/384). Test configuration contains 2 total hosts, 4 total sockets, 384 total cores. Result details are from: <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vmmark/2023-05-16-Dell-PowerEdge-R7625.pdf>

About the ThinkSystem SR665 V3

The ThinkSystem SR665 V3 is a 2S 2U rack server built with the performance and flexibility to manage a complex set of workloads like data management, analytics, virtualization, cloud, and AI. The 256 cores of the dual 4th Gen AMD EPYC™ processors with up to 160 PCIe lanes and up to 6TB of the latest DDR5 memory, maximize the performance of this 2U server.

The SR665 V3 is designed to support today's infrastructure and easily scale to prepare for next gen workloads. Multiple drive options using SAS/SATA and NVMe with hot-swap capabilities and XClarity system management software enable changes to be made quickly with ease. The versatile design doesn't stop at storage, the SR665 V3 includes support for multiple options for GPU and PCIe to satisfy graphics, speed, and budget requirements.

About the Lenovo ThinkSystem DM7100F Storage

The ThinkSystem DM7100F is a perfect fit for a wide range of enterprise workloads, including big data and analytics, artificial intelligence, engineering and design, hybrid clouds, and other storage I/O-intensive applications. The DM7100F is a scalable, unified, all flash storage system that is designed to provide high performance, simplicity, capacity, security, and high availability for large enterprises.



The DM Series is an enterprise class storage system with enhanced data management features, Hybrid cloud connectivity with all major cloud vendors in the market today and offers superior performance via support for NVMe drives and NVMe over Fabric connectivity.

The ThinkSystem DM7100F offers the following key features and benefits:

- All-flash array capabilities to meet the demand for higher speed storage and provide higher IOPs and bandwidth with lower power usage and total cost of ownership than hybrid or HDD-based solutions
- Flexible Hybrid Cloud connectivity
- Unified data management, with the ability to manage, block, file and object data from one interface.
- Scalable, all flash storage with dual active/active controller configurations for high availability and performance.
- NVMe over Fabrics helps achieve up to two times higher performance at a half of the latency with ThinkSystem DB Series switches and directors.

About VMmark

The VMmark 3 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 3 is used to compare the performance of different hardware platforms and configurations.

Customers implementing or evaluating virtualization platforms use VMmark 3 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 high-performance solutions for virtualization applications, please contact your Lenovo Sales Representative.

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

To learn more about the Lenovo ThinkSystem SR665 V3 server, visit the SR665 V3 product web page: <https://www.lenovo.com/us/en/p/servers-storage/servers/racks/thinksystem-sr665-v3/len21ts0009>

Related product families

Product families related to this document are the following:

- [2-Socket Rack Servers](#)
- [DM Series Storage](#)
- [ThinkSystem SR665 V3 Server](#)
- [VMmark Benchmark Results](#)

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