ThinkSystem SR655 V3 Sets World Record with New VMmark 4 Benchmark Result
Performance Benchmark Result

The Lenovo ThinkSystem SR655 V3 has set a new VMmark benchmark record. Two of these powerful servers, each configured with a single 5th Gen AMD EPYC 9005 Series of processors have set a new VMmark world record:

- The world's #1 VMmark 4 result for 1-Socket Servers in a matched pair configuration

The VMmark 4 benchmark is a free web-scale multi-server virtualization platform benchmark independently developed by VMware, part of Broadcom. The benchmark is designed to enable enterprise customers to objectively measure and compare the performance and scalability of various virtualization platforms.

The ThinkSystem SR655 V3 server achieved the following VMmark 4.0.3 score (1):

- **3.31 @ 3.6 Tiles**

This result is:

- The highest VMmark 4 result published for servers in a 1-socket matched pair configuration

- It outperforms similar results using the same processors
    - 5.4% better performance than the Dell PowerEdge R6715. (2)
    - 7.1% better performance than the Fujitsu PRIMERGY RX1440 M2. (3)

The two ThinkSystem SR655 V3 servers achieved this record level of virtualization performance using the following configuration:

- Two Lenovo ThinkSystem SR655 V3 servers configured as system under tests (SUTs), each with:
    - One AMD EPYC 9845 160-core processors at 2.1GHz
      (1 processor, 160 cores, 320 threads)
    - 12x Lenovo TruDDR5 96GB 6400MHz memory DIMMs
    - VMware ESXi 9.0.1.0, Build 24957456
    - Two ThinkSystem Emulex LPe36002 2-Port 64Gb PCIe Fibre Channel adapters

- Two 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)
    - 24 x Lenovo TruDDR5 64GB 4800MHz memory DIMMs
    - VMware ESXi 9.0.1.0, Build 24755229

- Five Lenovo ThinkSystem SR665 servers configured as external storage targets:
    - SUSE Linux Enterprise Server 15 SP6 Linux 6.4.0-150600.21-default kernel
    - Attach to the SUTs via a Fibre Channel switch

Results referenced are current as of December 9, 2025.

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

(1) Two Lenovo ThinkSystem SR655 V3 servers each with one AMD EPYC 9845 processor (2 hosts, 2 total sockets, 320 total cores, 640 total threads) scored 3.31 @ 3.6 tiles. See the full disclosure report (FDR) at https://www.vmware.com/docs/2025-12-09-Lenovo-ThinkSystem-SR655-V3-3_31

(2) Two Dell PowerEdge R6715 servers each with one AMD EPYC 9845 processor (2 hosts, 2 total sockets, 320 total cores, 640 total threads) scored 3.14 @ 3.8 tiles. See the FDR at : https://www.vmware.com/docs/2025-10-14-dell-poweredge-r6715-3_14

(3) Two Fujitsu PRIMERGY RX1440 M2 servers each with one AMD EPYC 9845 processor (2 hosts, 2 total sockets, 320 total cores, 640 total threads) scored 3.09 @ 3.8 tiles. See the FDR at: https://www.vmware.com/docs/2025-01-07-Fujitsu-PRIMERGY-RX1440M2-3_09

About the ThinkSystem SR655 V3

The Lenovo ThinkSystem SR655 V3 is a 1-socket 2U server that features the 5th Gen AMD EPYC "Turin" family processors. With up to 160 cores per processor and support for the new PCIe 5.0 standard for I/O, the SR655 V3 offers the ultimate 1-socket server performance in a 2U form factor. The server is ideal for dense workloads that can take advantage of GPU processing and high-performance NVMe drives.

The SR655 V3 server is a highly agile offering, supporting 31 different drive bay configurations utilizing the front, middle and rear locations of the server. It also includes 6 different slot configurations at the rear of the server. This adds flexibility to ensure that you can configure the server exactly the way your workload requires.

Combining performance and flexibility, the SR655 V3 server is a great choice for enterprises of all sizes. The server offers a broad selection of drive and slot configurations and offers high performance features that industries such as finance, healthcare and telco need. Outstanding reliability, availability, and serviceability (RAS) and high-efficiency design can improve your business environment and can help save operational costs.

About VMmark

VMmark® is a product of VMware, Inc. It is a tool used by hardware vendors and others to measure the performance and scalability of virtualization platforms. The VMmark benchmark:

- Allows accurate and reliable benchmarking of virtual data center performance.
- Allows comparison of the performance of different virtualization platforms.
- Can be used to determine the performance effects of changes in hardware, software, or configuration within the virtualization environment.
- See more information at https://www.vmware.com/products/vmmark

About ThinkSystem Emulex LPe36002 64Gb 2-port PCIe Fibre Channel Adapter

The Emulex 64 Gb LPe36002 2-port Fibre Channel host bus adapter for ThinkSystem servers is an ideal solution when requiring high-speed 64 Gb/s data transfer in storage connectivity for virtualized environments, data backup, and mission-critical applications.

See details at https://lenovopress.lenovo.com/lp1496-thinksystem-emulex-lpe36002-64gb-fibre-channel-adapter

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 SR655 V3 server, visit the SR655 V3 product web page: https://www.lenovo.com/us/en/p/servers-storage/servers/racks/thinksystem-sr655-v3/len21ts0021

Related product families

Product families related to this document are the following:

- 1-Socket Rack Servers
- ThinkSystem SR655 V3 Server
- VMmark Benchmark Results

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