

ThinkSystem SR655 V3 Sets 8 World Records with New SPECjbb Benchmark Results

Performance Benchmark Result

Lenovo has published several new SPECjbb2015 benchmark results that have set eight new world records. These results have been achieved on the powerful Lenovo ThinkSystem SR655 V3 server using the new AMD EPYC 9754 processor.

The eight benchmark world records are:

- Best SPECjbb2015-Distributed max-jOPS score on one node with 1 processor running Microsoft Windows Server
- Best SPECjbb2015-Distributed critical-jOPS score on one node with 1 processor
- Best SPECjbb2015-Distributed critical-jOPS score on one node with 1 processor running Linux
- Best SPECjbb2015-Distributed critical-jOPS score on one node with 1 processor running Microsoft Windows Server
- Best SPECjbb2015-MultiJVM max-jOPS score on a 1-processor system running Microsoft Windows Server
- Best SPECjbb2015-MultiJVM critical-jOPS score on a 1-processor system running Microsoft Windows Server
- Best SPECjbb2015- Composite max-jOPS score on a 1-processor system running Microsoft Windows Server
- Best SPECjbb2015- Composite critical-jOPS score on a 1-processor running Microsoft Windows Server

SPECjbb2015 is a Java Business Benchmark and is the SPEC benchmark used for evaluating the performance of servers running typical Enterprise Java applications.



The eight world records were achieved with the following seven top SPECjbb2015 scores:

- **SPECjbb2015-Distributed Max-jOPS (Windows Server 2022): 386,171 (1)**
- **SPECjbb2015-Distributed Critical-jOPS (SUSE 15SP4): 334,423 (2,3)**
- **SPECjbb2015-Distributed Critical-jOPS (Windows Server 2022): 296,893 (4)**
- **SPECjbb2015-MultiJVM Max-jOPS (Windows Server 2022): 386,171 (5)**
- **SPECjbb2015-MultiJVM Critical-jOPS (Windows Server 2022): 295,335 (6)**
- **SPECjbb2015- Composite Max-jOPS (Windows Server 2022): 383,872 (7)**
- **SPECjbb2015-Composite Critical-jOPS (Windows Server 2022): 254,624 (8)**

SPECjbb2015 measures multi-threaded compute-intensive applications, with mixed industry workloads such as online purchase, inventory management, and supply. Critical-jOPS scores are ideal for measuring latency-critical applications and max-jOPS scores are ideal for measuring throughput-critical applications.

The Lenovo ThinkSystem SR655 V3 was configured as follows:

- 1x AMD EPYC 9754 "Bergamo" processor - 128 cores, 2.25 GHz, 256 MB L3 cache per processor
- Up to 768 GB system memory
- Operating systems:
 - SUSE Linux Enterprise Server 15 SP4
 - Windows Server 2022 Datacenter
- Java HotSpot 64-bit Server VM, version 17.0.7

Results referenced are current as of July 1, 2023. To view details of these results, go to these SPEC web pages:

- (1) Best 1-node, 1-processor SPECjbb2015-Distributed Max-jOPS score run on Windows. Used Windows Server 2022 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01061.html>
- (2) Best 1-node, 1-processor SPECjbb2015-Distributed Critical-jOPS score. Used SUSE 15 SP4 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01068.html>
- (3) Best 1-node, 1-processor SPECjbb2015-Distributed Critical-jOPS score run on Linux. Used SUSE 15 SP4 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01068.html>
- (4) Best 1-node, 1-processor SPECjbb2015-Distributed Critical-jOPS score run on Windows. Used Windows Server 2022 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01060.html>
- (5) Best 1-processor SPECjbb2015-MultiJVM Max-jOPS score run on Windows. Used Windows Server 2022 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01063.html>
- (6) Best 1-processor SPECjbb2015-MultiJVM Critical-jOPS score run on Windows. Used Windows Server 2022 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01062.html>
- (7) Best 1-processor SPECjbb2015-Composite Max-jOPS score run on Windows. Used Windows Server 2022 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01059.html>
- (8) Best 1-processor SPECjbb2015-Composite Critical-jOPS score run on Windows. Used Windows Server 2022 & Oracle Java SE 17.0.7
<https://www.spec.org/jbb2015/results/res2023q3/jbb2015-20230517-01058.html>

To view all SPECjbb2015 results, go to
<https://www.spec.org/jbb2015/results/jbb2015.html>

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 SPECjbb2015

The SPECjbb 2015 benchmark has been developed from the ground up to measure performance based on the latest Java application features. It is relevant to all audiences who are interested in Java server performance, including JVM vendors, hardware developers, Java application developers, researchers and members of the academic community.

SPECjbb2015 scores are ideal for measuring throughput and latency of multi-threaded compute-intensive applications such as online purchasing, inventory management, and supply.

Learn more

To learn more about solutions for Java 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 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](#)
- [SPECjbb Benchmark Results](#)
- [ThinkSystem SR655 V3 Server](#)

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