ThinkSystem SR950 V3 Sets 10 World Records with New SPECjbb on Linux Benchmark Result

Performance Benchmark Result

Lenovo has published several new SPECjbb2015 benchmark results that have set ten new world records. These results have been achieved on the powerful Lenovo ThinkSystem SR950 V3 server using the new Intel Xeon Platinum 8490H processor.

The ten benchmark world records are:

- Best SPECjbb2015-MultiJVM max-jOPS score on one node with 8 processors running Linux Server
- Best SPECjbb2015-MultiJVM max-jOPS score on one node with 8 processors
- Best SPECjbb2015-MultiJVM max-jOPS overall score
- Best SPECjbb2015-MultiJVM critical-jOPS score on one node with 8 processors running Linux Server
- Best SPECjbb2015-MultiJVM critical-jOPS score on one node with 8 processors
- Best SPECjbb2015-MultiJVM critical-jOPS overall score
- Best SPECjbb2015-Distributed max-jOPS score on one node with 8 processors running Linux Server
- Best SPECjbb2015-Distributed max-jOPS score on one node with 8 processors
- Best SPECjbb2015-Distributed critical-jOPS score on one node with 8 processors running Linux Server
- Best SPECjbb2015-Distributed critical-jOPS score on one node with 8 processors

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

The ThinkSystem SR950 V3 with 1 node 8 processors achieved the following ten top SPECjbb2015 scores:

- **SPECjbb2015-MultiJVM max-jOPS (SUSE 15SP5): 1,356,786** (1,2,3)
- **SPECjbb2015-MultiJVM critical-jOPS (SUSE 15SP5): 1,012,835** (4,5,6)
- **SPECjbb2015-Distributed max-jOPS (SUSE 15SP5): 1,127,931** (7,8)
- **SPECjbb2015-Distributed critical-jOPS (SUSE 15SP5): 896,441** (9,10)

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 SR950 V3 was configured as follows:

- 8x Intel Xeon Platinum 8490H processors - 60 cores, 1.90 GHz, 112.5 MB L3 cache per processor
- Up to 4TB system memory
- SUSE Linux Enterprise Server 15SP5
- Java HotSpot 64-bit Server VM, version 17.0.11

Results referenced are current as of May 30, 2024. To view details of these results, go to these SPEC web pages:

- (1) Best 1-nodes, 8-processors SPECjbb2015-MultiJVM max-jOPS score run on Linux. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01272.html
- (2) Best 1-nodes, 8-processors SPECjbb2015-MultiJVM max-jOPS score. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01272.html
- (3) Best SPECjbb2015-MultiJVM max-jOPS overall score. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01272.html
- (4) Best 1-nodes, 8-processors SPECjbb2015-MultiJVM critical-jOPS score run on Linux. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01272.html
- (5) Best 1-nodes, 8-processors SPECjbb2015-MultiJVM critical-jOPS score. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01272.html
- (6) Best SPECjbb2015-MultiJVM critical-jOPS overall score. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01272.html
- (7) Best 1-nodes, 8-processors SPECjbb2015-Distributed max-jOPS score run on Linux. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01269.html
- (8) Best 1-nodes, 8-processors SPECjbb2015-Distributed max-jOPS score. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01269.html
- (9) Best 1-nodes, 8-processors SPECjbb2015-Distributed critical-jOPS score run on Linux. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01269.html
- (10) Best 1-nodes, 8-processors SPECjbb2015-Distributed critical-jOPS score. Used SUSE 15SP5 & Oracle Java SE 17.0.11
  https://www.spec.org/jbb2015/results/res2024q2/jbb2015-20240515-01269.html

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

About the ThinkSystem SR950 V3

The Lenovo SR950 V3 is an 8-socket server that features an 8U rack design, with two 4U units cabled together for ease of installation. The server offers technology advances, including 4th Gen Intel Xeon Scalable processors, and scale-up capacity of up to 32TB of system memory, up to 14x PCIe slots (6x front, 8x rear), and up to 16x 2.5-inch or 16x E3.S EDSFF drive bays.

The SR950 V3 is designed for the most demanding, mission-critical workloads, such as in-memory databases, large transactional databases, real-time analytics, ERP, CRM, and virtualized server workloads.

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 SR950 V3 server, visit the SR950 V3 product web page: https://www.lenovo.com/us/en/p/servers-storage/servers/mission-critical/thinksystem-sr950-v3/len21ts0023

Related product families

Product families related to this document are the following:

- SPECjbb Benchmark Results
- ThinkSystem SR950 V3 Server

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