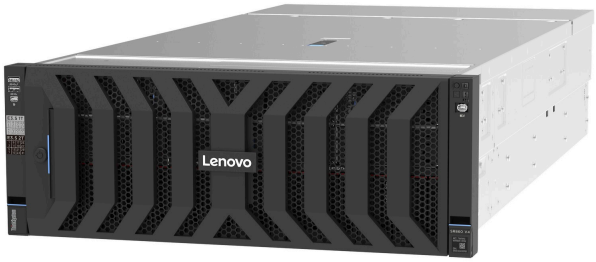
ThinkSystem SR860 V4 Sets World Record with New SAP Q2C Benchmark Result

Performance Benchmark Result

The Lenovo ThinkSystem SR860 V4, using four Intel Xeon 6788P processors, has demonstrated leadership SAP performance by setting a world record on SAP's Quote-to-Cash (Q2C) benchmark configured with 80M initial records.

Q2C is a brand-new load testing tool from SAP that's used to simulate a representative modern-day production SQL load on SAP S/4HANA. The simulation is a balanced transactional order-to-cash (OLTP) workload, including a reporting component (OLAP). Lenovo has been working together with SAP on this new workload, resulting in this day-one #1 overall result.



A Q2C landscape consists of three components:

- SAP HANA database (scaleup or scaleout landscape) including a shipped HANA backup with Q2C content
- SAP ABAP application server(s) based on S/4HANA 2021 (ABAP Kernel: 789 PL201)
- Q2C driver (OS environment with tools for simulating the SAP GUI frontend)

The ThinkSystem SR860 V4 server achieved the following certified SAP Q2C performance result (1):

- Number of SAP Q2C benchmark users: **54,100**
- Initial documents: **80,000,000**
- Average throughput over all load levels (aSAPS): **260,700**
- Average dialog response time: **0.99 seconds**

These scores are the highest number of aSAPS and Q2C benchmark users ever attained on a 4-socket server configured with 80M initial documents.

The ThinkSystem SR860 V4 server that achieved this record level of SAP performance was configured in a 2-tier configuration as follows:

- 4x Intel Xeon Platinum 6788P 86-core 2.0GHz processors
  - 4 processors, 344 cores, 6880 threads in total
  - 112 KB L1 cache and 2048 KB L2 cache per core, 336 MB L3 cache per processor
- 4,096 GB of Lenovo TruDDR5 memory (32 x 128GB DDR RDIMM, 6400MT/s)
- 6 x 2.9TB Mixed Use NVMe
- SUSE Linux Enterprise Server 15 SP7
- SAP HANA 2.0 Revision 89
- SAP S/4HANA Server 2021

4-socket Intel Xeon 6788P servers excel across demanding Q2C OLTP and OLAP workloads, combining massive core density and high-performance DDR5 memory capacity to maximize real-time transaction processing and enterprise analytics benchmark performance. Supporting up to 688 execution threads across a vast, unified memory pool under a single OS footprint, the architecture ensures high-concurrency query handling and rapid throughput for complex transactional and in-memory datasets.

Results referenced are current as of November 06, 2026. For the latest SAP Q2C benchmark results, visit: https://www.sap.com/dmc/exp/2018-benchmark-directory/#/q2c.

(1) This benchmark result fully complies with the SAP Benchmark Council regulations and has been audited and certified by SAP SE (certification number 2026050). Details are available at https://www.sap.com/dmc/benchmark/2026/Cert26050.pdf. The benchmark was performed in Bucharest, Romania by Lenovo engineers.

About the ThinkSystem SR860 V4

The Lenovo ThinkSystem SR860 V4 is an ideal 4-socket 4U rack server for customers that need industry-leading reliability, management, and security, as well as maximizing performance and flexibility for future growth. The server offers technology advances, including Intel® Xeon® 6700-Series processors, up to 16 TB of 6400 MHz DDR5 memory, and up to 18x PCIe slots for adapters.
With four Intel® Xeon® 6700-Series processors, massive memory capacity and available expansion for up to four enterprise-class GPUs and up to 56 drives, the Lenovo ThinkSystem SR860 V4 is designed to be the scalable, performance-tuned engine that can tackle compute-intensive applications like visualization, machine learning, artificial intelligence, analytics, and 3D modeling. Add to that an optional Neptune™ Core liquid cooling module to enable even higher sustained performance, and the ThinkSystem SR860 V4 stands out as an enterprise-class system, delivering performance and efficiency without compromise. See more information at https://lenovsopress.lenovo.com/datasheet/ds0197-thinksystem-sr860-v4

About SAP Q2C Quote-To-Cash

Q2C (Quote-to-Cash) is a load test tool used to execute a representative modern-day production SQL load on S/4HANA. The load simulation is a balanced mix of a transactional order-to-cash workload (OLTP) with a reporting component (OLAP).

For benchmarking, it is used with the Q2C scenario in a 2-tier environment, where SAP HANA and ABAP application server components are running on the same server.

Q2C results are reported in aSAPS (Advanced SAPS), where 100 aSAPS is defined as 2,000 fully business processed order line items per hour in combination with the throughput of 2 OLAP queries per hour. SAP Q2C is therefore using an advanced throughput metric which contains OLTP and OLAP to calculate aSAPS. For further information on SAPS and aSAPS, see https://www.sap.com/about/benchmark/measuring.html.

Q2Ctest result metrics include a throughput number (business transactions per hour - tph) as well as database request times (in ms) for transactional (OLTP) and analytical (OLAP) components of the workload, and the system's CPU load (utilization). All numbers are averages over an interval of constant high load. The typical main goal in the load test is to increase the concurrent number of users until the throughput gets to a saturation point. It is also possible to compare database request times for similar setups, but this requires a low or medium load.

For more information about the benchmark, see https://www.sap.com/about/benchmark/appbm/q2c.html.

Learn more

To learn more about SAP solutions on Lenovo servers visit the following page:
https://www.lenovo.com/us/en/data-center/solutions/sap/

To learn more about the Lenovo ThinkSystem SR860 V4 server, visit the SR860 V4 product web page:
https://www.lenovo.com/us/en/p/servers-storage/servers/large-memory/lenovo-thinksystem-sr860-v4/len21ts0045?orgRef=https%253A%252F%252Flenovopress.lenovo.com%252F

Related product families

Product families related to this document are the following:

- SAP Alliance
- SAP Q2C Benchmark Results
- ThinkSystem SR860 V4 Server

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