

World Record SAP SD Benchmark Result on Windows for Lenovo 8-processor Two-Tier ThinkSystem SR950 Performance Benchmark Result

The Lenovo ThinkSystem SR950 server, using eight Intel Xeon Platinum 8180 processors, delivers outstanding results for the SAP SD 2-tier standard application benchmark in a Microsoft Windows environment on IBM Db2.

Lenovo announces a leadership 8-processor result (1) on Microsoft Windows for the two-tier SAP Sales and Distribution (SD) standard application benchmark. The result was published on September 14, 2018. Lenovo's result is 4.3% better than the closest competitor (2).



The result was achieved on the ThinkSystem SR950, configured with eight Intel Xeon processors, using IBM Db2 10.5 and SAP enhancement package 5 for the SAP ERP application release 6.0. It includes mitigations for vulnerabilities: CVE-2017-5754 (Meltdown), CVE-2017-5753 (Spectre variant 1) and CVE-2017-5715 (Spectre variant 2).

Lenovo delivered the following certified result:

- **Number of SAP SD benchmark users: 105,350**

Throughput:

- Fully processed order line items per hour: 11,910,000
- Dialog steps per hour: 35,730,000
- SAPS: 595,500
- Average database request time (dialog/update): 18 ms/ 24 ms

Configuration of the central server:

- Lenovo ThinkSystem SR950
- 8x Intel Xeon Platinum 8180M 28C 205W 2.5 GHz processors
- Cache: 64 KB L1 cache and 1024 KB L2 cache per core, 38.5 MB L3 cache per processor
- 3072 GB system memory

Software platform:

- Operating system, central server: Windows Server 2012 Standard Edition R2
- RDBMS: IBM Db2 10.5
- SAP Business Suite software: SAP enhancement package 5 for SAP ERP 6.0

Results referenced are current as of September 14, 2018. For the latest SAP benchmark results, visit: <https://www.sap.com/dmc/exp/2018-benchmark-directory/#/benchmarks/sd>.

(1) This benchmark fully complies with the SAP Benchmark Council regulations and has been audited and certified by SAP SE ([Certificate Number 2018038](#)). Details can be obtained from Lenovo and SAP. The benchmark was performed at Data Center Performance Lab, Lenovo in Research Triangle Park, NC, USA, by Lenovo engineers.

(2) Fujitsu published the SAP SD 2 tier Benchmarks results on June 19,2017 with 101,000 users on its 8 socket system using Intel 8180 processor with 224 cores/448 threads. [Certificate number 2017016](#).

About the ThinkSystem SR950

Lenovo ThinkSystem SR950 is designed for your most demanding, mission-critical workloads, such as in-memory databases, large transactional databases, batch and real-time analytics, ERP, CRM, and virtualized server workloads.

The powerful 4U ThinkSystem SR950 can grow from two to eight Intel Xeon Scalable Family processors, and with 96 DIMM sockets, supports up to 12 TB of high-speed memory without having to replace the server enclosure or upgrade to a physically larger design. The modular design of SR950 speeds upgrades and servicing with easy front or rear access to all major subsystems to maximize server availability.

The SR950 packs numerous fault-tolerant and high-availability features into a high-density design. The SR950 offers enterprise scalability and advanced RAS features to support the most demanding mission-critical applications that require 24x7 operations. The new 4U rack optimized design reduces the space needed to support massive network computing operations and simplifies servicing.

Lenovo XClarity Controller is an all-new hardware embedded management engine common in every ThinkSystem server. XClarity Controller features an uncluttered graphical user interface, industry standard Redfish-compliant REST APIs, and enables booting in half the time of prior generation servers, with up to 6x faster firmware updates.

Lenovo XClarity Administrator is a virtualized application that centrally manages ThinkSystem servers, storage, and networking. Via reusable patterns and policies, it ramps up and scales infrastructure provisioning and maintenance. It serves as a central integration point to extend your data center management processes to physical IT. Running XClarity Integrators in external IT applications, or integrating through REST APIs, helps you further speed services provisioning, streamline IT management, and contain costs.

About SAP SD

SAP SD benchmark is a test for standard sale and distribution business components on SAP ERP, which is indicative of the performance of the application and database on a specific hardware environment. For more information about the benchmark, go to <https://www.sap.com/about/benchmark/appbm/erp.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/>

For more information about the benchmark, go to
<http://www.sap.com/about/benchmark/appbm/erp.html>

To learn more about the Lenovo ThinkSystem SR950 server, visit the [SR950 product web page](#).

Related product families

Product families related to this document are the following:

- [IBM Alliance](#)
- [IBM Db2](#)
- [Mission Critical Servers](#)
- [SAP Alliance](#)
- [SAP SD Benchmark Results](#)
- [ThinkSystem SR950 Server](#)

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