

## ThinkSystem SR950 Delivers Leadership Result with 4-Socket SAP SD Two-Tier Benchmark Performance Benchmark Result

The Lenovo ThinkSystem SR950 server, using four Intel Xeon Platinum 8280L 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 4-processor result (1) on Microsoft Windows for the two-tier SAP Sales and Distribution (SD) standard application benchmark. The result was published on April 2, 2019. The result offers a 53% performance improvement over the Lenovo x3850 X6 server (2).



The results were achieved on the Lenovo ThinkSystem SR950 on Microsoft Windows, configured with four Intel Xeon processors, using IBM Db2 10.5 and SAP enhancement package 5 for the SAP ERP application release 6.0.

Lenovo delivered the following certified result (1):

- **Number of SAP SD benchmark users: 62,001**

Throughput:

- Fully processed order line items per hour: 6,805,670
- Dialog steps per hour: 20,417,000
- SAPS: 340,280
- Average database request time (dialog/update): 20 ms/ 25 ms

Configuration of the central server:

- Lenovo ThinkSystem SR950
- 4x Intel Xeon Platinum 8280L processor 28C 205W 2.7GHz Processor
- Cache: 64 KB L1 cache and 1024KB L2 cache per core, 38.5 MB L3 cache per processor
- 1536 GB system memory

Software platform:

- Operating system, central server: Microsoft Windows Server 2016 Datacenter
- RDBMS: IBM Db2 10.5
- SAP Business Suite software: SAP enhancement package 5 for SAP ERP 6.0

Results referenced are current as of April 2, 2019. For the latest SAP benchmark results, visit: <https://www.sap.com/about/benchmark.html>.

(1) This benchmark fully complies with the SAP Benchmark Council regulations and has been audited and certified by SAP SE ([certification number 2019015](#)). 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) The claim of achieving 53% percent improvement in performance is based on results on the two-tier SAP SD standard application benchmark achieved by Lenovo System x3850 X6 (4 processors / 96 cores / 192 threads, Intel Xeon Processor E7-8890 v4, 2.20 GHz, processors ([certification number 2016027](#))).

## 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 second-generation Intel Xeon Scalable Family processors, and with 96 DIMM sockets, supports up to 24 TB of high-speed memory. The modular design of SR950 speeds upgrades and servicing with easy front or rear access to all major subsystems to maximize server availability. The ThinkSystem SR950 also supports Intel Optane DC Persistent Memory delivering a new, flexible tier of memory designed specifically for data center workloads that offer an unprecedented combination of high-capacity, affordability and persistence.

The SR950 packs numerous fault-tolerant and high-availability features into a high-density, 4U rack-optimized design that reduces the space needed to support massive network computing operations and simplify 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.

ThinkShield is a comprehensive approach to security designed to secure the data center, from the foundation of your infrastructure to the network's edge and guard against a security breach. ThinkShield protects your business with each offering, from development through disposal.

## 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/>

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](#)

## Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service. Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

Lenovo (United States), Inc.  
8001 Development Drive  
Morrisville, NC 27560  
U.S.A.  
Attention: Lenovo Director of Licensing

LENOVO PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary. Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk. Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

© Copyright Lenovo 2025. All rights reserved.

This document, LP1115, was created or updated on April 2, 2019.

Send us your comments in one of the following ways:

- Use the online Contact us review form found at:  
<https://lenovopress.lenovo.com/LP1115>
- Send your comments in an e-mail to:  
[comments@lenovopress.com](mailto:comments@lenovopress.com)

This document is available online at <https://lenovopress.lenovo.com/LP1115>.

## Trademarks

Lenovo and the Lenovo logo are trademarks or registered trademarks of Lenovo in the United States, other countries, or both. A current list of Lenovo trademarks is available on the Web at <https://www.lenovo.com/us/en/legal/copytrade/>.

The following terms are trademarks of Lenovo in the United States, other countries, or both:

Lenovo®

ThinkShield®

ThinkSystem®

XClarity®

The following terms are trademarks of other companies:

Intel®, Intel Optane®, and Xeon® are trademarks of Intel Corporation or its subsidiaries.

Microsoft®, Windows Server®, and Windows® are trademarks of Microsoft Corporation in the United States, other countries, or both.

IBM® and Db2® are trademarks of IBM in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.