Lenovo



Lenovo Storage S2200 Delivers Best in Class Price Performance SPC-1 Benchmark

Performance Benchmark Result (withdrawn product)

June 30, 2016... The Storage Performance Council (SPC) has published the SPC-1 benchmark results for the Lenovo Storage S2200. The S2200 achieved the best result in its class, Traditional Entry SAN Controller-based Storage configurations under \$25,000 (Price Bands 1-4).



The price-performance result achieved by the S2200 is as follows:

• \$0.23 per SPC-1 IOPS

As well as achieving a best-in-class result, the S2200 also achieved an overall #3 ranking. The overall ranking is shown in the Top ten results by Price-Performance page on the SPC web site. Supporting documentation of the result are published on the SPC web site:

- SPC-1 Executive Summary
- SPC-1 Full Disclosure Report

Lenovo's first SPC publishing demonstrates leadership price performance in the Traditional Entry SAN space, proving that it is not necessary to spend more to get high performance storage for your IT environment. For customers who need to accelerate online transactions or Service Providers looking to improve their Service Level Agreements (SLAs), the Lenovo Storage S2200 will deliver the best performance at the lowest cost in the industry for Traditional Entry (<\$25,000) controller-based storage space.

About the Lenovo Storage S2200

The Lenovo Storage S2200 is a SAN Storage Array that offers simplicity, speed, scalability and reliability for a variety of workloads. With an easy to use management interface, the S2200 makes complex administrative storage tasks incredibly simple.

The Lenovo Storage S2200 is designed to fit your business by giving you a choice of supported connectivity options, SAS, Fibre Channel or iSCSI. The S2200 supports 12x 3.5-inch large form factor drives or 24x 2.5-inch small form factor and supports up to a total of up to 96 drives with the addition of three expansion enclosures.

The S2200 is perfect for deployments in companies that need advanced features at an affordable price. Equipped with storage tiering, asynchronous replication, high availability, thin provisioning, and other enterprise class features, the S2200 provides your business with a solid foundation to grow. With a simple controller upgrade with an S3200 controller, your system can support more performance, users, host ports, capacity, and snapshots without data migration.

For more information about the S2200, see the Lenovo Storage S2200 Product Guide .

About the configuration

The S2200 was configured as follows:

- Lenovo Storage S2200 SFF SAS Dual Controller, 6411-2B4
- 4x 2.5" 400GB SAS SSD, 00MM720
- 2x 1m SAS cables, 00WE7482
- 1x N2225 SAS/SATA HBA, 00AE912

The configuration is shown in the following figure.

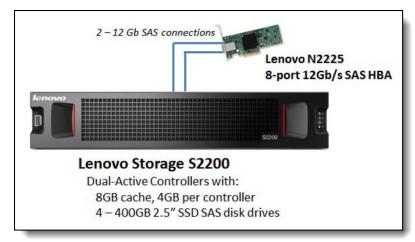


Figure 1. Configuration used in the benchmark

For more details, see the SPC-1 Executive Summary and SPC-1 Full Disclosure Report.

About SPC and the SPC-1 benchmark

The Storage Performance Council (SPC) is a non-profit corporation founded to define, standardize, and promote storage subsystem benchmarks as well as to disseminate objective, verifiable performance data to the computer industry and its customers.

The SPC-1 benchmark specification defines a scalable suite of tests that emulates the workload seen by a storage system in support of an online application, such as an email server. There are defined relationships between three different areas of storage, and specific workloads applied to each of the areas. It includes a mixed set of read, read/write, and write workloads, at various block sizes. SPC-1 results are designed to show how a storage subsystem may perform in your IT environment across a variety of workloads.

Related product families

Product families related to this document are the following:

- Lenovo SAN Storage
- SPC-1 Benchmark Results
- Storage Benchmarks

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 2024. All rights reserved.

This document, LP0541, was created or updated on July 20, 2016.

Send us your comments in one of the following ways:

- Use the online Contact us review form found at: https://lenovopress.lenovo.com/LP0541
- Send your comments in an e-mail to: comments@lenovopress.com

This document is available online at https://lenovopress.lenovo.com/LP0541.

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 $\ensuremath{\mathbb{R}}$

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