Lenovo



TPC-E Benchmark Result for System x3850 X6 Performance Benchmark Result (withdrawn product)

Lenovo sets a new 4P TPC-E benchmark performance record! The Lenovo System x3850 X6 again delivers the best 4P performance on TPC-E.

June 6, 2016 ... The Lenovo System x3850 X6 server, now updated with the latest Intel Xeon E7 v4 processors, yet again proves that it is the fastest 4P server running the TPC-E benchmark.

This new #1 4P result (1) joins Lenovo's current #1 2P (2) and #1 overall/8P (3) performance results to extend Lenovo's dominance of the TPC-E benchmark and On Line Transaction Processing (OLTP) performance.



The TPC-E benchmark is designed to enable customers to objectively measure and compare the performance and price of various On Line Transaction Processing (OLTP) and database systems.

The System x3850 X6 server achieved the following score:

• 9,068.00 tpsE (transactions per second E) @ \$139.85 USD/tpsE. (1)

This score is the best four-processor performance in the industry, a full 30% faster than the performance of the x3850 X6 using the prior generation Intel Xeon E7 v3 processors. (4)

The x3850 X6 achieved this record level of OLTP performance using Microsoft SQL Server 2016 Enterprise Edition and Microsoft Windows Server 2012 R2 Standard Edition. The x3850 X6 was configured with four Intel Xeon E7-8890 v4 processors at 2.20 GHz (4 processors/96 cores/192 threads) and 4096GB of TruDDR4 memory.



This result also relied on the Lenovo Storage E1024 DAS enclosures. Ten E1024 storage enclosures and over 80 SAS SSDs were used in the benchmark configuration, attached directly to ServeRAID M5225-2GB SAS/SATA controllers running RAID-5.

The Lenovo Storage E1012 and E1024 Disk Expansion

Enclosures offer universal storage expansion capabilities that are designed to provide simplicity, speed, scalability, security, and high availability for small to large businesses. The E1012 and E1024 deliver enterprise-class storage technology in a cost-effective solution with flexible drive configurations and RAID or JBOD (non-RAID) host connectivity or Lenovo storage area network (SAN) array expansion.

The System x3850 X6 is a 4U, 4-socket rack server that delivers maximum performance and availability for business-critical applications and databases.

With system support for up to 96 processor cores, 6TB of system memory, and over >85TB of flash storage, the x3850 X6 not only is known for its leadership performance, but also for its ability to scale in order to power traditional databases as well as new in-memory database and analytics solutions. Now customers can achieve leadership solution performance by virtualizing high performance databases and applications on the same server.

X6 platforms are the sixth generation of enterprise X Architecture (EXA) technology and represent more than 15 years of investment and innovation to exceed industry standards.

Results referenced are current as of June 6, 2016. To view all TPC results, visit http://www.tpc.org.

(1) The total solution availability for this TPC-E benchmark result is July 31, 2016. See the details for this result here: http://www.tpc.org/4078

(2) The #1 2P TPC-E performance result is held by the Lenovo System x3650 M5. Result details are at: http://www.tpc.org/4076

(3) The #1 overall world-record TPC-E performance result is held by the eight-processor Lenovo System x3950 X6. Result details are at: http://www.tpc.org/4075

(4) The previous #1 4P TPC-E performance result, until today, was held by the Lenovo System x3850 X6 using Intel Xeon E7 v3 series processors. Result details are at: http://www.tpc.org/4072

Related product families

Product families related to this document are the following:

- 4-Socket Rack Servers
- Direct-Attached Storage
- Microsoft SQL Server
- Mission Critical Servers
- TPC-E Benchmark Results

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