

The background features several horizontal rounded rectangles containing images of server racks. These images show various components like fans, cables, and indicator lights, creating a high-tech, data-center aesthetic. The rectangles are positioned at the top, middle, and bottom of the slide, framing the central text.

Leadership Performance and Innovation

November 1, 2017 | Dave Weber, Director & CTO, Lenovo

LENOVO'S VISION ALIGNS TO CLIENT'S DATA CENTER

Segment



Infrastructure

Customer Expectations

End to end portfolio

Traditional & New IT

Delivered as unique solutions

Lenovo Portfolio

Servers, storage, networking, management

Hyperconverged, Converged, SDS, AFA

Engineered Solutions



Private &
Hybrid Cloud
Solutions

Simplify cloud

Use familiar management tools

Robust services offerings

vmware



Lenovo

XClarity

Upward integrators

Essential to managed & consultative services



Public Cloud
Solutions

Extreme agility and scalability

Cross cloud arbitration

Be a cost effective hardware

vendor with strong global support

LENOVO ENGINEERED SOLUTIONS

Accelerating Value, Reducing Risk and Complexity



Cloud

Efficient and simplified management of compute, storage and networking



Big Data

Gathering & analyzing volumes of raw data to generate value and profits



Analytics

Accelerate decision making and gain insights into key trends



Database

Manage data quickly to support analytic and transactional applications



Client

Virtualization
Keep data secure and applications scalable for remote and mobile users



openstack™
CLOUD SOFTWARE

cloudera

SAP HANA

SAP

CITRIX™

vmware



Microsoft

HORTONWORKS™ spark

IBM

MAPR

Microsoft
ORACLE®

Lenovo®

ThinkSystem

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SERVER
PLATFORMS

WORLD RECORD
PERFORMANCE
& RELIABILITY

7

STORAGE
OFFERINGS

REVOLUTIONIZED
ECONOMICS

5

NETWORK
SWITCHES

OPTIMIZED CLOUD
PERFORMANCE



Lenovo Powers One of Europe's Biggest Supercomputers

3,400 nodes with latest Intel Xeon CPUs. 48 racks. 390TB of memory. 48km of cable and wire..

- **13,677 Trillion Operations per Second**
- HPC simulations of complex challenges in energy, pharma, medical, engineering, smart cities, nautical, automotive and aviation
- Developing solutions to problems with air quality, agriculture, weather and climate



SR950: Mission-Critical, High-Speed Analytics

New 4U 4P-8P mission critical system

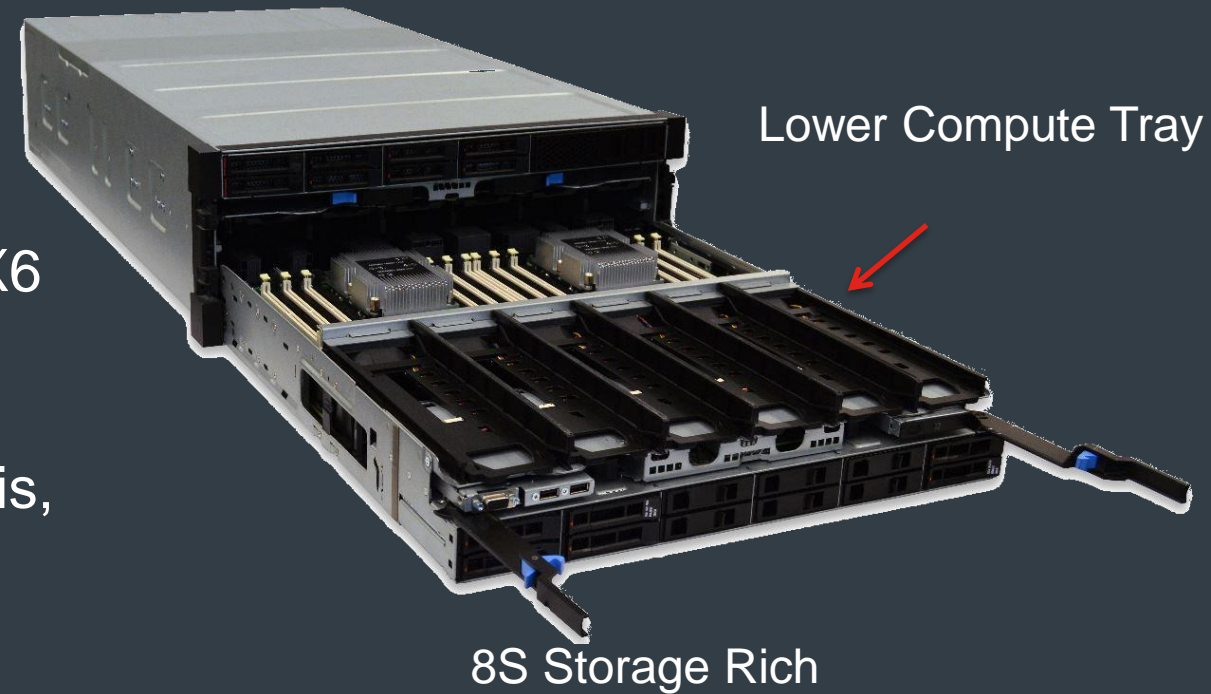
- Replaces both x3850 & x3950 X6

New system innovation

- 8P in a 4U chassis, 2X the density of x3950 X6
- Modular chassis with slide-out tray design provides easy front or rear access
- Up to 24 2.5" HS drive bays on front of chassis, including 12 NVMe bays.
- Up to 12 TB of mem, 17 PCIe slots

Value add for

- SAP HANA & large in-memory database customers (HANA 2.0 development platform)
- OLTP customers that need the highest raw processing power



Lenovo

A STRONG FOUNDATION OF RELIABILITY, PERFORMANCE, CUSTOMER SAT

#1

Customer Satisfaction¹

In the latest TBR survey (1H 2017), Lenovo was #1 for the 7th consecutive study going back to January 2015.

#1

x86 Server Reliability²

#1 in ITIC Reliability Survey for 4 years running.

#1

SAP HANA Supplier

Lenovo has shipped over 8000 SAP HANA appliances worldwide.

#1

Microsoft SQL 2017 Performance

SR650 TPC-E Performance and Price/Performance³ and SR950 TPC-H⁴

#2

TOP500 HPC Vendor⁵

Lenovo is the fastest growing TOP500 HPC vendor worldwide and ranks 2nd in the number of fastest systems.

62

Current World Record x86 Server Benchmarks⁶

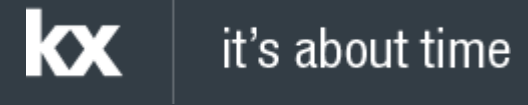
Lenovo enables faster performance and data analysis for mission critical applications.

1. [TBR Customer Satisfaction Survey, 2016](#)
2. [ITIC Global Server Hardware Reliability Report, 2015-2016](#)
3. www.tpc.org/4080

4. www.tpc.org/3328
5. [Top500 The List, 2016](#)
6. ThinkSystem Benchmark summary as of Nov 1, 2017

Lenovo Servers – STAC[®] Leadership Performance

- Kit & benchmarks:
 - SR950: 4x 8180's, 3.0 TB, kdb+ 3.5, RHEL 7.3
 - SUT ID: KDB171024. Tested with STAC-M3[™] (Shasta)
 - SR650: 2x 8180's, 1.5 TB, kdb+ 3.5, RHEL 7.3, Antuco
 - SUT ID: KDB171010. Tested with STAC-M3 (Antuco)
- July 2017
 - 6x P4600 / P4500 NVMe drives
 - Set 26 records
- November 2017
 - 6x 750TB P4800x vs P4500 / P4600 drives
 - Set 20 new records, some results 2.5x – 7.5x better
- Observations: Use Optane[™] for recent data & high volume random R/W



thanks.

Different is better