10 Advantages of Lenovo X6 Servers
Article (withdrawn product)

The Lenovo X6 servers are the high end of Lenovo's server portfolio. The x3850 X6 is a 4U rack server scalable to four processors. The x3950 X6 is an 8U rack server scalable to eight processors. These X6 servers have many advantages over alternative servers. Listed below are 10 of these advantages.

1. High Compute Performance

The Lenovo X6 servers deliver exceptionally fast application performance. Equipped with the new Intel Xeon processor E7-4800 v4 and E7-8800 v4 processors, the x3850 X6 and x3950 X6 servers can deliver up to 6.0 TB or 12 TB of memory and 96 or 192 cores of processing power, respectively. Armed with these capabilities, you can host essential mission-critical applications, implement large virtual machines, or run sizeable in-memory databases without compromises in performance, capacity, or scalability. The X6 servers have held numerous #1 performance benchmarks across the industry.

2. Agile Design

The agility and adaptability of the Lenovo X6 modular rack design enables you to design a fit-for-purpose solution that meets your needs. Rack the X6 server one time and then access all components vie front and rear access without pulling out the server. Also, you can realize infrastructure cost savings by hosting multiple generations of technology in a single platform.

3. Scale-Up Enterprise Applications

Several application and workloads lend themselves particularly well to scale-up, four-socket servers rather than scale-out deployments with smaller servers. Factors contributing to a decision to scale up rather than scale out include processing and memory requirements, number of end users, scalability cost and administrative cost.

4. Server Consolidation

By consolidating to fewer and more powerful Lenovo X6 servers, you can achieve real business benefits of reduced operating costs, reduced power and cooling costs and reduced software licensing costs. You can improve utilization, improve application performance and extend data center life.

By consolidating workloads to X6 servers, you can experience savings in a number of categories. Without consolidation, these costs will increase because larger numbers of physically separate servers are needed to support the workloads and to support all of the end users accessing the servers

5. Tremendous X6 Memory Capabilities

Lenovo X6 servers support up to 96 DIMMs or 6TB of memory in a four socket configuration and 192 DIMMs or 12TB or memory in an eight socket configuration. Almost all 2 socket servers max out at 1.5TB of memory. The large X6 memory capabilities allow clients to support memory intensive workloads and implement large virtual machines or run sizeable in-memory databases without compromise.

6. Increased Reliability, Availability and Serviceability

Lenovo X6 servers feature advanced reliability, availability and serviceability (RAS) features. Differentiated X6 self-healing technology, proactively identifies potential failures and transparently takes necessary corrective actions. These built-in technologies drive the outstanding system availability and uninterrupted application performance needed to host mission-critical applications.

7. Faster Service Delivery

Lenovo XClarity is a new centralized resource management solution that enables administrators to deploy infrastructure faster and with less effort. XClarity provides automated discovery, monitoring, firmware updates and compliance, pattern-based configuration management, and deployment of operating systems and hypervisors to multiple systems.

Lenovo XClarity provides:

- Increase Efficiency - Administrators are able to find the right information and accomplish critical tasks faster through an uncluttered, dashboard-driven graphical user interface (GUI).

- Consolidate Infrastructure Management - Lenovo XClarity is easily extended into the leading virtualization management platforms from Microsoft and VMware using software plugins, called Lenovo XClarity Integrators.

- Improve Agility - Lenovo XClarity can help advance data center agility through an open approach to software defined environments.

8. SAP X6 Solutions

SAP Applications

Support your core business operations with leading SAP applications, processes, and technologies designed to work together in a fully integrated business suite powered by cutting edge x3850 and x3950 X6 servers. The X6 solution provides a powerful platform for your mission-critical SAP Business Suite applications. Integrating hardware, software and memory advancements, the X6 enterprise servers are designed to be faster, more agile and more resilient.

X6 is an ideal platform for SAP customers that are looking for reliability, manageability, and scalability with the flexibility to run Windows or Linux. X6 provides a cost-efficient, scalable platform with superior performance and unmatched reliability.

See the Lenovo Press paper SAP Business Suite on Lenovo X6 Systems for more information.

SAP HANA

The Lenovo X6 enterprise servers are designed to provide faster performance and support for more memory. Using self-contained compute books SAP HANA on X6 is purpose-built to support large scale SAP HANA deployments.

9. Microsoft X6 Solutions

The Lenovo x3850 and x3960 X6 are the ideal platforms for SQL Server Consolidation. The Lenovo X6 servers are designed for high throughput from processor to memory to I/O, which makes them ideal for consolidating many established, mature SQL Server workloads that are running on individual servers. In some cases, these older servers are under-used and are not capitalizing completely on valuable data center resources, such as space, power or cooling.

You can depend on the System x Solution for Microsoft SQL on X6 to provide the speed, scalability and resilience you need, along with the bottom line results your business demands.

10. VMware X6 Solutions

Lenovo and VMware have partnered to deliver a X6 qualified solutions designed to virtualize mission-critical applications and accelerate their performance. This same solution can be used for traditional virtualized infrastructures or can be used to build a software-defined datacenter.

Related product families

Product families related to this document are the following:

- 4-Socket Rack Servers
- 8-Socket Rack Servers
- Large Memory Capacity Servers

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