



## Maximizing the power of analytics

with SAS° and Lenovo° on Intel architecture

## The challenge of transforming big data into insights

As the amount of data available to businesses continues to grow, its value also grows – but only if you can quickly convert it into meaningful insights. After you understand the data and build analytical models, you have to deploy it in the enterprise by making those insights available to decision makers. To do all that, you need a scalable, reliable and powerful solution that can support fast, in-depth data analytics.

SAS and Lenovo can help. SAS Analytics and big data technologies, powered by Intel® Xeon® processors with Intel® SSDs, work with Lenovo X6 systems to provide a highly scalable, integrated enterprise solution for big data analytics. This solution speeds time to insight, so your data can reliably inform and improve your business' decision making.

# The benefits of data processing and analytics with SAS® and Lenovo

Many organizations are moving to Hadoop, relying on its ability to efficiently store, process, manage and analyze large volumes of data. Companies have also utilized enterprise data warehouses (EDWs) for data processing and analysis. Both solutions provide customers with fast, scalable, highly available analytics by using SAS and Lenovo X6 hardware configurations based on the Intel Xeon processors E7 v3 family and Intel SSDs.

Traditional analytical solutions constantly move data from disk to compute nodes

and back during processing. This incurs big costs in time, resources and bandwidth the larger the data sets, the higher the costs. By combining SAS Analytics on Lenovo X6 systems with Hadoop and/or an EDW, you can have a faster, more efficient and less costly data storage and processing infrastructure.

#### Fast, scalable and reliable: A SAS® and Lenovo X6 solution for big data analytics

As big data expands, enterprises' ability to utilize diverse data will become more and more critical. That could mean running real-time analytics at the site of data generation; creating self-service business intelligence reports; visualizing data in new ways to discover trends; developing and refining analytical models interactively; and much more. But to effectively use your data in these ways, you need a strong, stable analytics infrastructure.

The SAS Analytics and Lenovo X6 solution is an innovative answer to your analytics challenges. Lenovo offers two X6 servers: the four-socket, 4U, 6TB System x3850 X6 server and the eight-socket, 8U, 12TB System x3950 X6. These sixth-generation servers, based on an agile system design, deliver the fast performance and resiliency you need for mission-critical databases, enterprise applications, and virtualized environments. Both X6 systems pack numerous fault-tolerant and high-availability features into high-density, rack-optimized packages, reducing the space required to support massive analytics operations and simplifying management.

### Why Lenovo?

For your business to thrive and gather the insights it requires, you must make changes and upgrades to your IT infrastructure. But if you're not careful about the hardware you choose, it can easily increase complexity and cost. To manage evolving technology, divergent customer demands and fluctuating costs, you need an agile approach to platform design.

Lenovo X6 systems give you that flexibility. The adaptability of the modular X6 rack design enables you to design a fit-for-purpose solution that meets your company's needs. You can easily upgrade your processors and memory to scale up as your analytics requirements grow and change. By hosting multiple generations of technology in a single platform, you can cut costs without compromising performance or capacity.

With Lenovo X6 systems, it's simple to scale up from the System x3850 to the System x3950, moving from four to eight sockets and instantly gaining twice the performance. Instead of having to deal with a sprawling datacenter, you can rely on the technology you know and trust while gaining exceptional performance and ultra-low latency.

Together, Lenovo and SAS offer you a flexible, reliable solution for big data analytics that will ensure your analytics workloads are fast, scalable, and always available.





The X6 servers employ a lid-less, modular design in which each major subsystem is its own "book," a removable and swappable component. This configuration means that you can access components from the front or the rear and upgrade and service them easily, translating to higher availability for your users and customers. Both X6 systems offer enterprise-level scalability and advanced RAS features to support your most demanding analytics applications.

With these advantages, you can build an efficient analytics lab specifically suited to your organization that quickly delivers the accurate insights you need. Simultaneously, IT and business can collaborate to incorporate analytics into your operational processes, thereby gaining timely, relevant value from your data.

#### About SAS, Intel and Lenovo

SAS is the leader in analytics. Through innovative analytics, business intelligence and data management software and services, SAS helps customers at more than 75,000 sites make better decisions faster. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®.

Intel (NASDAQ: INTC) is a world leader in computing innovation. The company designs and builds the essential technologies that serve as the foundation for the world's computing devices. Additional information about Intel is available at intel.com.

Lenovo is the leading provider of x86 systems for the data center. The portfolio includes rack, tower, blade, dense and converged systems, and supports enterprise class performance, reliability and security. Lenovo also offers a full range of networking, storage, software and solutions, and comprehensive services supporting business needs throughout the IT lifecycle. Learn more at www.Lenovo.com.

#### Learn more

To learn more about how SAS and Lenovo can help you maximize the value of your data, contact your representative or visit sas.com/partners.





