Easily deploy end-to-end data science pipelines with Lenovo AI-Ready Data Center infrastructure to improve your datadrivenoperations.

Today, data science has become the world’s largest compute segment. Modest improvements in the accuracy of analytics models translate into billions for the bottom line. But while it’s transformative, data science is also complex and time consuming. From extract, transform, and load (ETL) operations to inferencing, data science pipelines rely on large-scale infrastructure to power critical business operations.

These operations are bottlenecked by the serial nature of CPU-only computing, which is compounded when scaling out for large processes. With Lenovo AI-Ready Infrastructure and the NVIDIA EGX platform, enterprises can easily leverage parallel GPU computing to remove bottlenecks and quickly improve performance. This increased performance significantly improves time to insight and the return on investment for data-driven enterprises.

KEY APPLICATIONS / PLATFORMS
- Anaconda Enterprise
- Cloudera Data Platform
- H2O.ai
- Informatica
- Jupyter Notebooks
- Plotly
- Oracle Machine Learning

PROOF POINTS
Running an industry-standard Apache Spark workload, NVIDIA EGX demonstrated a 5X speedup—with some queries showing up to a 10X speedup relative to the same servers without GPUs.

SOLUTION OVERVIEW
The Value of Lenovo AI-Ready Infrastructure and the NVIDIA EGX Platform

Lenovo AI-Ready servers and storage, coupled with the NVIDIA EGX™ platform enables enterprise IT to deliver diverse applications on high-per-formance and cost-effective infrastructure. The platform is a combination of high-performance GPU computing and highspeed, secure networking in NVIDIA-Certified Lenovo servers. Lenovo AI-Ready servers and storage coupled with the NVIDIA EGX platform allows customers to prepare for the future while driving down costs by standardizing on a single unified architecture for easy management, deployment, operation, and monitoring.

The EGX platform supports a vast suite of accelerated data science applications that deliver immediate benefits to users. Lenovo AI-Ready servers coupled with NVIDIA GPUs and networking are validated for performance, manageability, security, and scalability and are backed by enterprise-grade support from NVIDIA and Lenovo. With an NVIDIA-Certified System, enterprises can confidently choose performance-optimized hardware solutions to power their accelerated computing workloads—both in smaller configurations and at scale.

Learn more about accelerated servers at nvidia.com/certified-systems
Deploy High-Performance Data Science Solutions in Your Data

Historically, analytics workflows have been slow, cumbersome, and inefficient, often relying on CPU-only servers for data preparation, training, and deployment. Lenovo AI-Ready servers and storage coupled with the NVIDIA EGX platform dramatically boosts the performance of your end-to-end analytics workflows, speeding up the time to value while reducing overall cost.

Lightning-Fast Performance on Big Data

Lenovo AI-Ready infrastructure and the NVIDIA EGX platform accelerates the end-to-end data science life cycle, whether your organization needs to reduce processing time of ETL pipelines or accelerate terabyte-scale machine learning workflows. With RAPIDS, data practitioners can accelerate pipelines on NVIDIA GPUs, reducing data operations like data loading, processing, and training from days to minutes. RAPIDS abstracts the complexities of accelerated data science by building upon popular Python and Java libraries, enabling users to see benefits immediately.

Why Lenovo

Focused on a bold vision to deliver smarter technology for all, Lenovo is developing world-changing technologies that create a more inclusive, trustworthy, and sustainable digital society. By designing, engineering and building the world’s most complete portfolio of smart devices and infrastructure, we are also leading an Intelligent Transformation – to create better experiences and opportunities for millions of customers around the world.

To find out more visit www.lenovo.com.