Lenovo AI and NVIDIA-Certified Systems

Enabling the Enterprise Accelerated Data Center

Accelerated workloads abound across all industries, from the use of artificial intelligence for better customer engagement, to data analytics for business forecasting, to advanced visualization for quicker product innovation. With the drive towards remote and flexible workplaces, the need for virtual desktops to be as powerful as physical desktops is also growing. And scientific researchers are innovating ways to solve problems that go well beyond traditional CPU-only computing. Enterprises are looking for an easy way to deploy modern, scalable computing infrastructure to run their GPU-accelerated applications, whether in the data center or at the edge.

The Value of Lenovo AI and NVIDIA-Certified

Lenovo AI optimized 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.

The certification test suite is designed to exercise the performance and functionality of the configured server by running a set of software that represents a wide range of real-world applications. This includes deep learning(DL) training, AI inference, data science algorithms, intelligent video analytics (IVA),

Security:

Lenovo ThinkShield is embedded in Lenovo AI infrastructure to ensure resiliency and security in the data center and at the edge.

Performance:

MLPerf benchmarks prove the leadership performance of Lenovo AI servers with NVIDIA GPUs. Lenovo AI servers are designed an optimized for AI workloads.

Resiliency:

NVIDIA-Certified systems undergo rigorous testing to ensure they are ready for enterprise AI workloads.

ThinkShield

high-performance computing (HPC) and CUDA® functions and rendering. It also covers infrastructure performance acceleration, such as network and storage offload, security features, and remote management capabilities.

Lenovo AI and NVIDIA-Certified Systems provide these key benefits tailored for enterprise IT

Performance

Lenovo AI servers are designed and optimized for AI workloads. Customers can run most accelerated applications on these systems and be confident that they will perform well. Lenovo AI servers have proven performance leadership in the latest MLPerf benchmark results

Manageability

Lenovo AI servers that are NVIDIA-Certified work well out of the box, streamlining the procurement experience and reducing time to deployment. The validation of features such as remote management further simplifies the experience of IT administrators. Additionally, Lenovo AI servers are equipped with Lenovo Intelligent Infrastructure Orchestration (LiCO) which manages infrastructure across large and small deployments

Scalability

Lenovo AI infrastructure supports LiCO which enables workloads to scale from a single node to very larger cluster deployments. LiCO also allows the ability to manage multiple users across the AI infrastructure environment.

Security

NVIDIA ThinkShield -Certified Systems secure workflows by protecting data at the platform, network, and application layers. Whether deployed in a data center or at the edge, customers can be assured that they do not have to compromise on security features when running accelerated applications.

NVIDIA-Certified Systems Software Support

Many customers will choose to run software from the NVIDIA NGC™ catalog, which offers a wide range of software products such as pre-built application containers, Helm charts for automated deployment in a Kubernetes environment, libraries and SDKs for application development, and industry-based AI frameworks for building application workflows. To provide enterprise support for these customers, NVIDIA offers NVIDIA-Certified Systems Software Support. Every NVIDIA-Certified System qualifies for this support, which can be purchased through the server vendor. This service offering covers:

- NVIDIA GPU and networking drivers
- CUDA libraries and toolkits
- Software for integration with Kubernetes, including GPU operators, container runtimes, and device plug-ins
- Industry-leading software for AI training and inferencing as well as data analytics

Direct access to NVIDIA subject matter experts allows for quick remediation of L1 software issues during local business hours or via web and email. Support also includes clear escalation paths for L2 and L3 issues. Enterprises can maximize user productivity during development and minimize system downtime during deployment.

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**.