Lenovo and NVIDIA Amplify their Partnership Delivering Compact Solutions for AI-Driven Enterprises

Article

AI transformation doesn't need to be massive in size—just massive in impact

Lenovo is proud to share our latest Lenovo Hybrid AI Advantage with NVIDIA offerings powered by NVIDIA accelerated compute, which deliver accessible entry points for businesses building enterprise AI factories - with new NVIDIA RTX PRO Server Edition in both 2U and 3U form factors. Lenovo's industry-leading reliability, high-performance, and compact Lenovo ThinkSystem SR650a V4 and SR675 V3 servers and the cutting edge NVIDIA RTX PRO 6000 Blackwell SE GPUs are coming together to deliver unparalleled AI performance, scalability, and efficiency with a mini footprint.

As enterprises across industries embrace AI to drive innovation, Lenovo and NVIDIA are committed to simplifying the AI journey through Lenovo Hybrid AI Advantage with NVIDIA. Whether you're just stepping into AI or expanding an enterprise-wide AI initiative, our latest collaboration provides an accessible, reliable, and scalable entry point into the world of AI-accelerated innovation.

Welcome to a new generation of compact, enterprise AI that offers unmatched performance, efficiency, and scalability—without the worry.

Lenovo + NVIDIA: A Powerhouse for the AI-driven enterprise

Through Lenovo Hybrid AI Advantage™ with NVIDIA businesses gain an edge in building enterprise AI factories designed for real-world, real-time workloads—from inference to generative AI to advanced simulation. Delivering powerhouse enterprise AI factory solution, Lenovo and NVIDIA are empowering enterprises of all sizes to seamlessly adopt and scale artificial intelligence (AI) in their data centers without worry.

Lenovo's high-performance, high-efficient, compact server solutions with NVIDIA accelerated compute, software and enterprise architecture are designed for all, meeting customers along their AI journey where and when they need it.

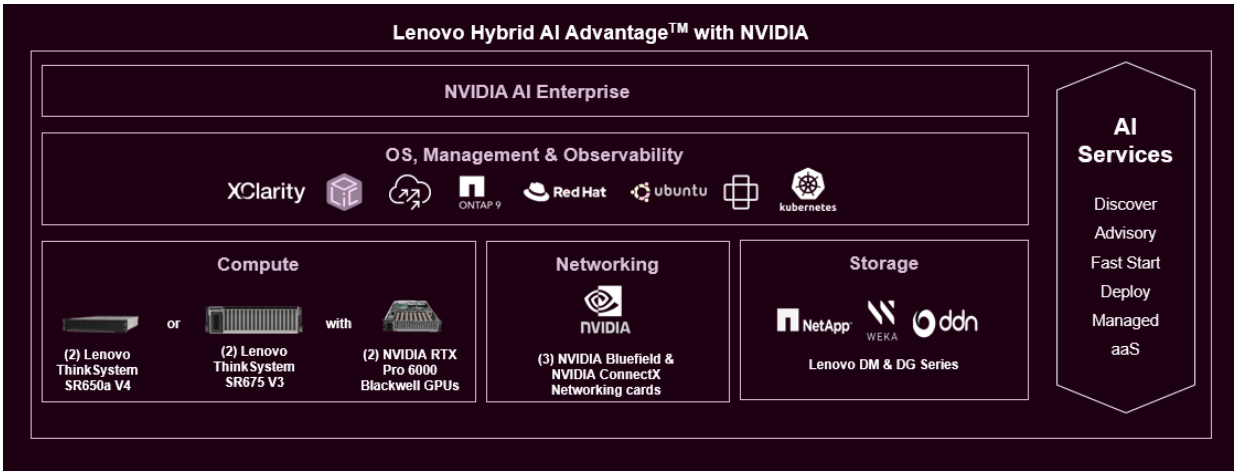
Next gen capabilities and performance to power AI innovation

The Lenovo ThinkSystem SR650a V4 and SR675 V3 are purpose-built to support a wide range of AI workloads for agentic and physical AI, including a LLM inference, digital twins, roboticsmachine learning, deep learning, and multi-modal generative AI.

For enterprises that are testing the AI waters for a pilot project or full-scale AI factory environments, our latest solution delivers compact, cost-effective infrastructure that's ideal as a starting point.

Lenovo servers with NVIDIA RTX PRO 6000 Blackwell SE GPUs deliver exceptional AI and visual computing capabilities, enabling up to 6x the performance for AI use cases like LLM inference, over 3x the performance for visual computing applications, and 2x performance for simulation when compared to the previous generation L40S. This breakthrough performance will enable breakthrough acceleration for applications across industries such as automotive, retail, manufacturing, healthcare, and financial services. Lenovo and NVIDIA share a commitment to accelerating enterprise AI with validated, high-performance solutions.

Lenovo's Hybrid AI Platform includes compact powerhouses for the AI era



The Lenovo ThinkSystem SR650a V4 and SR675 V3 --designed to provide maximum flexibility and performance in compact form factors with:

- **2x Processors**: Powered by the latest Intel® Xeon® 6700-series or 6500-series processors (SR650a V4) or 5th Gen AMD EPYC™ 9005 processors (SR675 V3), delivering robust processing power for AI and high-performance computing (HPC) workloads.
- **2x NVIDIA RTX PRO 6000 Blackwell Server Edition GPUs**: Equipped with 96GB of ultra-fast GDDR7 memory, these GPUs provide unmatched performance for agentic AI, physical AI, scientific computing, 3D graphics, and video rendering.
- **3x Networking cards**: Featuring NVIDIA BlueField and NVIDIA ConnectX networking platforms for high-speed, low-latency connectivity, ensuring seamless integration with enterprise networks, storage, and AI clusters.

The SR650a V4 is optimized for high-density, scale-out workloads in a 2U chassis, supporting up to 4 double-wide NVIDIA GPUs for enhanced performance.

The SR675 V3, a 3U rack server, supports up to 8 GPUs, offering greater scalability for larger AI models and more intensive workloads.

NVIDIA-certified for enterprise AI and integrated with Lenovo Hybrid AI Advantage™ delivers a validated architecture for rapid deployment and reduced operational complexity.

Key benefits for enterprises

- **Scalable AI Infrastructure**: Start with a single server and scale up to meet growing AI demands, with configurations supporting up to 160 GPUs in a 20-node cluster.
- **High Performance and Efficiency**: The RTX PRO 6000 Blackwell Server Edition GPUs, built on NVIDIA's Blackwell architecture, deliver superior AI and visual computing performance, accelerating time-to-value for AI-driven insights.
- **Simplified Deployment**: The Lenovo Hybrid AI platform, combined with NVIDIA AI Enterprise software and NVIDIA AI Blueprints, ensures seamless setup and management of AI workloads.
- **Trusted Partnership**: Lenovo and NVIDIA's collaboration leverages decades of expertise to deliver reliable, secure, and sustainable AI solutions tailored to enterprise needs.

Empowering industries with AI

Unlocking new possibilities across diverse industries:

- **Retail**: Enhance customer experiences with real-time analytics and personalized recommendations.
- **Manufacturing**: Optimize production with predictive maintenance and digital twins.
- **Healthcare**: Accelerate medical imaging and drug discovery with AI-driven insights.
- **Financial Services**: Improve fraud detection and risk analysis with high-speed AI processing.

Explore more

Lenovo Hybrid AI Advantage™ built on Lenovo ThinkSystem SR650a V4 and SR675 V3 is available for order starting Q4 2025 through Lenovo's global network of partners and distributors.

For more information on how Lenovo and NVIDIA can help you build your AI factory, visit http://www.lenovo.com/hybridAI or contact your Lenovo representative.

Join Lenovo and NVIDIA in shaping the future of enterprise AI—smarter, faster, and more accessible than ever before.

Author

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Related product families

Product families related to this document are the following:

- ThinkSystem SR650a V4 Server
- ThinkSystem SR675 V3 Server

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