



Infrastructure Modernization

Modernize your infrastructure for the radical future

Now more than ever, infrastructure modernization is a crucial enterprise priority driven by the rising demands for security, power efficiency, organized data, optimized virtualization and AI-ready data.

Today, AI is rapidly and radically reshaping every aspect of business. With this surge in infrastructure and application complexity, organizations are looking for what they can do now to fortify their infrastructure and prepare for future risks, diverse workloads and for AI readiness.

WW IT data center spending outpacing forecasts

While overall WW IT spend was expected to increase each year, the data center segment growth was unexpected and has since outpaced forecasts. Most significantly, in 2024 data center spending forecasts increased more than 3x to a record-breaking 35%.¹

According to Gartner, the 5 largest tech markets in 2025 are data center systems, devices, software, communications and IT services.

- Software and IT services are a large driver
- Spending in IT these segments is expected to be on projects AI-related
- Current spending on GenAI predominantly from companies technology
- CIOs will begin to spend on GenAI, beyond proof-of-concept work, starting in 2025 -- *John-David Lovelock, Distinguished VP Analyst at Gartner*

2025
WW IT spend
forecast

\$5.6T

15.5%
increase data
center

¹Gartner, 2025

To prepare for future applications, including AI, many organizations are choosing open architectures that provide simplified management, flexibility, performance, and security. Support and technical expertise are also needed to navigate fast changing technology trends, diverse workloads, changes in deployment models, new applications and use cases, and internal business requirements. As business transforms at an exponentially fast pace, more questions around cost, risk and data complexity loom in business leaders' minds. Advanced planning can address concerns and provide peace of mind during the transition.

Aging IT Infrastructure can make a data center vulnerable to attacks, implementing new workloads difficult, and managing power demands burdensome. These challenges are driving IT leaders to make decisions for the future.

That's why Lenovo helps organizations modernize their infrastructures to manage complex workloads like AI. Lenovo solutions offer high performance, leading security and reliability, simplified management, and a commitment to sustainability in all their products.

Modernizing your data center infrastructure can protect your data and increase resiliency with the latest technology.

Lenovo's ThinkSystem V4 Servers



Lenovo are committed to innovation, efficiency, and sustainability in the data center space. Lenovo Neptune liquid-cooled servers are just one example of how Lenovo are revolutionizing infrastructure by removing 99% of heat and cutting power use by 40%.

Partnering with Lenovo, we help your organization smoothly migrate and modernize with the processing power needed for radically emerging workloads, AI technologies and applications all while helping maintain your energy efficiency targets. Leveraging Lenovo's expertise, consulting capabilities, and system design services, ensures you have the right support at every stage of your infrastructure modernization journey.

The Lenovo portfolio makes it easy to integrate Lenovo solutions into your existing infrastructure. Together with Lenovo experts, you can identify and implement the right solutions for your unique requirements. By combining Lenovo expertise and innovation with a broad array of worldwide consulting, system design, and services, delivers a seamless modernization experience from planning to deployment.

Demand efficiency without sacrificing performance

When running AI-driven applications, virtualized environments, and cloud-native workloads, IT infrastructures must deliver high performance and faster time-to-insights to unlock the full potential of your data. When implemented correctly, these types of applications help organizations drive faster ROI, improved customer experience, enhanced efficiency and better business outcomes.

Lenovo's ThinkSystem and ThinkAgile V4 portfolio of servers brings the increased performance and performance-per-watt efficiencies you need to focus on innovations that grow your business.

100%
more Virtual
Machines

2X

DDR5 Memory with 50%
more bandwidth to
support faster time to
insight

6.1%

Increased
performance with
the latest
processors from
Intel® and AMD

PCIe Gen 5 with 2x
I/O bandwidth for
virtualization and AI

The Lenovo ThinkSystem Server Portfolio is a performance-optimized portfolio created using Lenovo's expertise, deep product innovation, and partnership with industry leaders like AMD, Intel®, NVIDIA and others.

Industry-leading security and reliability for a worry-free infrastructure

Modern IT infrastructure must adapt quickly to ensure security. Data breaches and cyberthreats are continuing to grow each year and could potentially disrupt your business with costly fines, loss of customers and damage to your brand. For example, the average cost of a data breach has increased 10% over the last year, making it the highest increase ever.

Lenovo recognize that security is one of the most critical requirements that organizations have today, and security is built into processes and products from design to decommission.

The Lenovo ISG product security program begins with the award-winning secure supply chain. It continues with secure business processes throughout the development life cycle, resulting in infrastructure and services that have security built in, helping organizations protect infrastructure from cyberattacks.

Lenovo

#1

x86 security for 6
consecutive years

#1

x86 server reliability
for 11
consecutive years

\$4.88M

average cost of data
breach

Used security AI
& automation

\$2.2M

average
cost savings

End-to-End IT Systems Management

Modern IT infrastructure is made up of on-premises data centers and private/public clouds solutions. Migrating to a hybrid model can be challenging, requiring seamless management and effective use of hybrid cloud solutions to succeed. Hybrid solutions allow for the optimization of workload placement and appropriate data placement for governance and security compliance.

Lenovo provides a comprehensive portfolio of hardware, software, services, and expert consulting to help IT leaders plan, architect, and execute hybrid strategies built on the latest technology. Lenovo solutions help organizations develop and deploy optimized hybrid infrastructures, delivering better manageability and transparency.

Lenovo innovations allow organizations to optimize resource utilization, monitor consumption, and track data workflow.

Lenovo

Flexible Storage

The ability to distribute, protect, analyze, and manage data is vital to an organization's business and customer success strategy. Lenovo is helping organizations across a variety of high-growth industries to modernize their storage infrastructure with solutions that flexibly scale across hybrid multi-cloud environments.

ThinkAgile Hyperconverged Solutions

Lenovo ThinkAgile solutions are engineered to reduce IT costs and complexity with software-defined, hyperconverged infrastructure. Pre-integrated, prebuilt and pre-tested, ThinkAgile solutions accelerate application deployment and add robust capabilities to your data center.

Systems Management

Lenovo XClarity provides smarter systems management by automating the deployment and management of Lenovo infrastructure with centralized resource management. Lenovo XClarity saves administrators time, reduces task complexity, and enhances server availability.

Lenovo TruScale IaaS

- Innovate with the latest data center hardware through a pay-as-you-go business model
- Scale easily without incremental capital investments
- Simplify IT with 24/7 proactive monitoring, management, and services

Lenovo Open Cloud Automation (LOC-A)

Automate manual tasks to drive speedier ROI and deployment at any scale in hours, instead of days or weeks.



Reach your sustainability goals with Lenovo

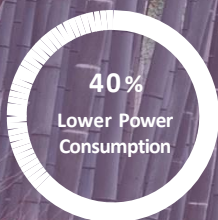
Research from International Data Corporation (IDC) shows that environmental, social, and governance (ESG) issues have become a CEO-level topic for organizations worldwide. The World Economic Forum has stated that embedding sustainability in strategy is essential to meet evolving investor pressure, consumer demand, and regulatory requirements. Furthermore, sustainability initiatives can help to reduce costs and can improve profitability by up to 60%, according to McKinsey & Company.

Lenovo has been recognized as one of the world's 100 most sustainable companies by Corporate Knights and share expertise and technology to help organizations on their sustainability journeys.

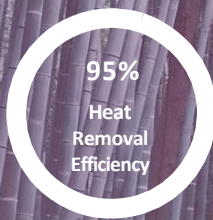
Lenovo Sustainability Solutions equip and empower organizations to pursue sustainability goals throughout the IT lifecycle, from manufacturing through to asset recovery. Lenovo put experience, insight, and global partnerships to work, helping to embed sustainability in your organization, rethink and measure sustainable performance, and access the right solutions to turn ambition into action.

Balancing performance with efficiency, the patented Lenovo Neptune direct liquid-cooling technology provides effective data center cooling with no performance trade-offs, helping to reducing data center energy costs by up to 40%.

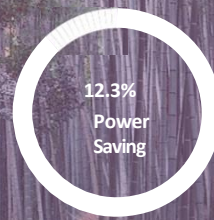
Lenovo



Reduction in power costs resulting from a 3.5x improvement in thermal efficiencies vs. air cooled



Optimized CPU heatsink designs lead to quicker heat removal and lower CPU power.



Open Loop delivers an additional power saving cost per server in a datacenter

Factory integrated racks save 3.5 million pounds of cardboard and 1.8 million pounds of plastic over 5 years.¹

The Value of Modernization

Lenovo believes that for organizations to run infrastructure and applications effectively and efficiently, they must prioritize and modernize. Adopting a plan for modernization that spans your infrastructure from edge-to-cloud allows you to be agile and adept at keeping up with today's demands. Keeping legacy systems continues to present many IT challenges and security is at the top of the list. Making the choice to modernize your IT infrastructure allows organizations the opportunity to connect to radically changing technologies quickly and easily to gain business value, remain competitive and scale as the business grows.

Lenovo

Let's talk

As a trusted Lenovo Channel Partner, Lenovo can help you assess the full portfolio of Lenovo solutions and take a secure, tailored path to infrastructure modernization. Contact us

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1. <https://s7d1.scene7.com/is/content/Lenovoassetsprod/sustainability-rethinking-packaging-eBookpdf>