BROCADE
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Smarter
technology
for all

Lenovo

Lenovo Gen 8 Fibre Channel

The intelligent, quantum-safe foundation for the enterprise AI era

Power your data center with the quantum-safe SAN designed for enterprise AI, and next-gen workloads

As technology advances at a blistering pace, so do the demands of the modern enterprise data center. Fueled by the rapid innovation of AI, your workloads, data, and critical applications require increasingly higher levels of performance, speed, security, and reliability than ever before.

Additionally, the increasing sophistication of technology means threats are evolving just as rapidly. While the power of AI and quantum computing opens new worlds of possibilities for good, they can also be used for more malevolent means. This results in a broader, more sophisticated spectrum of threats to your data and your business.

When faced with the combination of more demanding workloads and the rapidly shifting cyber threat landscape, it is essential that enterprises fortify their storage networks against all types of hidden risk so that they can deliver optimal performance, operate autonomously, streamline management, and protect critical data.

Discover how Lenovo Fibre Channel, built with Brocade technology, fortifies your data center with the industry's most secure, intelligent, and high-performance SAN.

Defend the data center with a quantum-safe SAN

Lenovo Gen 8 combines 128G performance with advanced security measures and embedded SAN AI technology to enable the most reliable and efficient way to protect and deliver critical information. By hardening the SAN against evolving security risks and enabling AI-powered autonomy to learn, adapt, and respond to changing environments, Lenovo Gen 8 is the most reliable, secure, intelligent, and highperformance network for storage.

Lenovo Gen 8 Fibre Channel secures, automates, and powers your SAN

Quantum-safe security

Harden your SAN against evolving risks

With over a third of all global Internet traffic comprised of bad bots, the cyberthreat landscape is becoming increasingly sophisticated and more challenging than ever. And as your enterprise extends applications further with technologies such as AI, and a wider range of end-user features, your attack surfaces expand geometrically. To complicate matters further, the emergence of quantum computing threatens to render current cryptographic standards obsolete with many hackers implementing a *harvest now and decrypt later strategy.*

Lenovo Gen 8 Fibre Channel works around the clock to protect your network, critical applications, and data from quantum computing and cyberthreats. Featuring **advanced security measures and cryptographic algorithms,** it hardens the SAN against evolving risks to keep your enterprise secure around the clock.
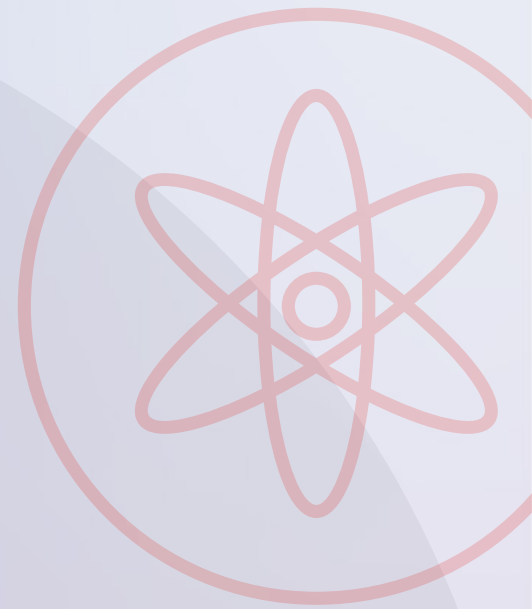
Lenovo Gen 8 strengthens your SAN security against modern and evolving threats.

- **Minimize attack surfaces** with applied mandatory access controls and limited privileges using industry best practice, Principle of Least Privilege architecture

- **Protect SAN fabrics** against attacks with 256-bit encryption and Post Quantum Cryptography (PQC)

- **Reduce the risk** of hijacking and the installation of malicious software with enhanced anti-tampering technology

- **Strengthen integrity** with advanced authentication and authorization with multi-factor authentication through federated identity and authentication

- **Monitor and alert** for security configuration changes and events through Monitoring Alerting Policy Suite (MAPS) and SANnav™ Management Portal
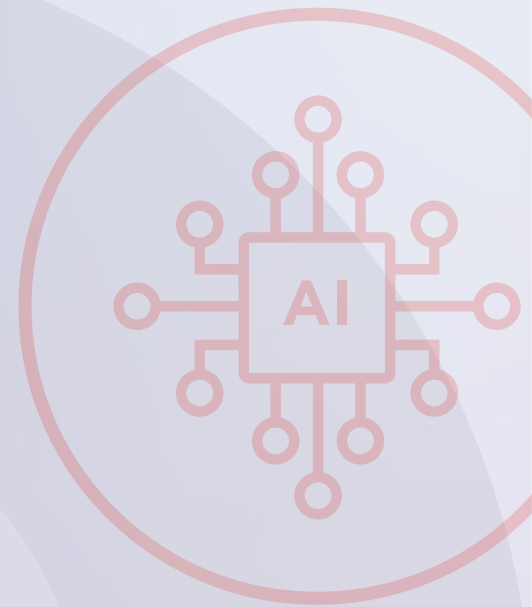
AI-powered
autonomy

Maximize uptime, simplify SAN management, and gain unmatched network visibility

Modern enterprise and AI-powered applications demand increasingly complex storage infrastructure to support critical business operations and real-time analytics architectures. Legacy environments face the mounting pressures of massive data growth, escalating performance requirements, and increasing operational complexity, but when manual intervention is required, humans simply cannot respond fast enough. As a result, IT teams using outdated SAN technologies will struggle with siloed management tools, manual provisioning processes, and limited visibility across the network in addition to the performance mismatch between generations of technology.

Lenovo Gen 8 features embedded SAN AI technology that works autonomously to learn, adapt, and respond to changing environments intelligently. With the new **SAN Fabric Intelligence (SAN FI), and Adaptive Traffic Optimizer,** it simplifies management for IT teams, giving them easier access to actionable insights to improve performance, reduce downtime, and simplify operations.

Lenovo Gen 8 modernizes and simplifies SAN management with AI-powered autonomy.

✓ **Learn and adapt** to changing application demand by dynamic load balancing across virtual channels with the Adaptive Traffic Optimizer

✓ **Highlight and examine key points of interest** to accelerate troubleshooting and drive smarter management decisions utilizing SAN Fabric Intelligence

✓ **Eliminate time-consuming** manual correlation of all application resources with complete, end-to-end visibility for all connected devices and components within your SAN

✓ **Proactively avoid probability of congestion** and reactively isolating over subscription from impacting other traffic with Adaptive Traffic Optimizer

✓ **Simplify complex telemetry** into actionable insights, through simple queries, fabric wide application impact analysis and root cause identification

✓ **Automatically monitor** fabric behavior, detect anomalies, and self-correct before issues impact performance through combination of Monitoring and Alerting Policy Suite (MAPS), Fabric Performance Impact Monitoring (FPI), Fabric Performance Impact Notification (FPIN) and Adaptive Traffic Optimizer

Powerful
performance

Accelerate data delivery with 128G and efficiency

As your enterprise relies on existing mission and business critical workloads and new realtime data processing for AI/ML workloads, application performance can become a critical business differentiator. But modern applications generate unprecedented I/O demands that older storage architectures simply were not built to handle. This results in bottlenecks that severely impact latency-sensitive workloads that require consistent, predictable performance at scale. And as your application profiles diversify, you face an increasing demand for flexible resource allocation and the highest levels of performance.

Lenovo Gen 8 transforms and modernizes storage infrastructure for critical applications, with an **industry-leading 128G bandwidth and unmatched low-latency.** You can build large-scale, high-density fabrics with fewer chassis and switches, seamlessly scaling on demand, and maximizing VM and application density for unmatched efficiency and utilization.

Lenovo Gen 8 provides a stable and scalable foundation for high-performance and AI workloads.

- ✓ **Maximize VM and application** density for unmatched efficiency and utilization with industry-leading 128G bandwidth

- ✓ **Enable faster response time and enhance user experience** of enterprise-AI and critical workloads with unmatched low-latency

- ✓ **Build scalable and efficient fabrics** by using fewer chassis and switches

- ✓ **Guarantee critical application performance** by automatically prioritizing traffic with Adaptive Traffic Optimizer

- ✓ **Unlock greater value and efficiency** with access to all software features in a bundled solution

- ✓ **Transport both Fibre Channel and IP storage** traffic on a unified storage fabric, utilizing AnyIO ports

- ✓ **Optimize performance, reduce downtime, and accelerate troubleshooting** by simplifying complex telemetry into actionable insights with built-in intelligence

Lenovo Gen 8

Features

Compared to previous generations of Lenovo technologies, Gen 8 enables your storage network to move more data, faster, and introduces new features, controls, and troubleshooting measures to protect and optimize your SAN.

Features	Gen 7	Gen 8
Maximum supported speed	64G	128G
Adaptive traffic optimizer	✖	✔
SAN fabric intelligence	✖	✔
Dual forward error correction	✖	✔
Data in flight encryption per ASIC	192G max total bandwidth	384G max total bandwidth
Data in flight compression per ASIC	128G max total bandwidth	256G max total bandwidth
Long distance buffer credits	24K	40K

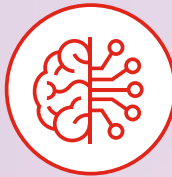Lenovo Gen 8 delivers six nines (99.9999%) availability and essential capabilities for the modern SAN.
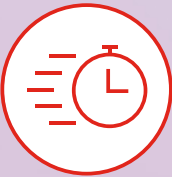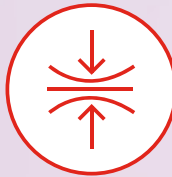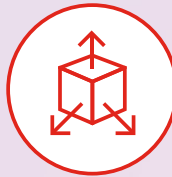
| Speed | Security | Scalability | Intelligence | Resiliency | Flexibility |

Defend the data center with **a quantum-safe SAN**

Legacy technology was not designed to meet the modern demands of today's data centers. Continuing to run your data center on outdated hardware and software will result in performance shortfalls and missed SLAs, reducing your competitive advantage in fast-moving markets. Additionally, older technologies will not have received current patches to correct the tens of thousands of Common Vulnerability Exposures (CVE) that are identified each year.

Lenovo Gen 8, built with Brocade technology, is the most secure, intelligent, and high-performance network for storage. By hardening the SAN against evolving security risks and enabling AI-powered autonomy to learn, adapt, and respond to changing environments, Gen 8 enables faster decisionmaking, improves operational efficiency, and maintains high levels of resiliency.

Learn more

For a deeper dive on what next-generation storage fabrics are, how they are commonly implemented, and what advantages they offer compared to less modern, less robust, and less secure technologies; download the **ESG Paper Building a Quantum-safe SAN for the Enterprise AI Era.**