Smarter technology for all

Lenovo

Fibre Channel

Effortless reliability. Seamless uptime.

Discover how Lenovo Fibre Channel provides worry-free reliability and operational simplicity for mission-critical applications and the data you depend on.

As an IT admin, you are experiencing increasing pressure. You are constantly being asked to support more applications, more users, and now AI and analytics workloads, which drives more complexity and time-consuming tasks.

On top of that, the business expects you to spin up infrastructure faster than ever without any downtime or delays. All of this is happening while teams are shrinking, and budgets are flat.

You are no longer just being judged on keeping systems up. Now you are being evaluated on how quickly you can deliver, how efficiently you can operate, and how smoothly you can keep everything running. Manual processes and late-night troubleshooting do not scale, and while automation tools sound great, in reality they often add more complexity and are one more toolset to learn.

That's where Lenovo Fibre Channel, powered by Brocade technology, with Autonomous SAN features comes in. Instead of piling on more tools, the network itself helps you by self-diagnosing issues, preventing congestion before it hits your apps, and automatically isolating faulty components. It keeps running in the background, nonstop, so you don't have to babysit. The result: you spend less time firefighting and chasing tickets, and more time focusing on the bigger projects that are strategic to your business.

Fibre Channel
The foundation of autonomous SAN

Lenovo Fibre Channel is purpose-built to address the unique demands of enterprise storage environments through intelligent automation and uncompromising reliability. It is a cyber resilient network designed with security in mind and implements many security measures to protect an organization against vulnerabilities, making it the top network choice for mission-critical storage.

Unlike general-purpose networking protocols that require extensive manual configuration and ongoing maintenance, Lenovo Fibre Channel was designed specifically to provide autonomous, resilient storage connectivity.

It transforms the network into an intelligent infrastructure that manages itself, automating routine tasks and troubleshooting to save administrators valuable time. Operating quietly in the background, it continuously monitors performance and resolves issues as they occur, ensuring applications run without disruption and constant oversight.

With built-in analytics and automation, Lenovo Fibre Channel gives administrators clear visibility across the SAN and simplifies day-to-day management.

The network not only identifies problems but also explains what happened, what it did to address the issue, and what still needs attention.

The end result is a storage network that delivers reliable performance, maximizes uptime, and reduces operational complexity—allowing IT teams to maintain critical workloads more efficiently and with less effort.

Working autonomously in the background, Lenovo Fibre Channel delivers the simplicity and reliability needed for mission-critical operations, transforming your storage infrastructure into a strategic enabler of business resilience and operational excellence that works autonomously behind the scenes.
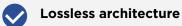
Fibre Channel — reliability
Engineered for always-on operations

Storage outages have fundamentally different consequences than typical network connectivity issues. Rather than requiring users to simply refresh a browser, storage disruptions often result in application crashes, database corruption, and business-critical system failures. Lenovo Fibre Channel is engineered specifically to prevent these scenarios through multiple layers of reliability that work together to ensure always-on data access.

The combination of robust hardware design, advanced ASICs, and intelligent network services enables Lenovo networks to deliver 99.9999% uptime—ensuring minimal downtime and uninterrupted network performance. This level of reliability is achieved through purpose-built mechanisms that far exceed what general-purpose IP networking can provide.

When your enterprise demands reliability and downtime simply isn't an option, Lenovo Fibre Channel is the right choice.

Lossless architecture
Uses buffer credit flow control to guarantee in-order, lossless frame delivery that's critical for transaction-heavy workloads

Redundant, self-healing fabric
Ensures that a single disruption does not affect application uptime through dual redundant, hardware-isolated fabrics

Built-in multipathing (MPIO) and automatic failover
Keeps data flowing even during component failures, without administrator intervention

Forward error correction (FEC)
Identifies and corrects bit errors on the fly, maintaining data integrity without retransmissions

Fabric performance impact notification (FPIN)
Enables faster, more intelligent multipathing decisions than TCP/IP-based stacks through an advanced, proactive alerting mechanism that notifies HBAs when a path is degraded

Monitoring and Alerting Policy Suite (MAPS)
Monitors physical links constantly and automatically decommissions suboptimal paths—rerouting traffic to healthy ones before applications are impacted

Predictable, deterministic performance
Delivers stable latency and throughput at scale by avoiding oversubscription or traffic contention

More than 95% of Global 2000 companies depend upon Brocade-based Fibre Channel technology for their critical applications specifically because of this unmatched reliability advantage. The technology's proven track record in the most demanding environments, including finance, healthcare, manufacturing, and government, demonstrates its capability to support mission-critical operations where failure is not an option.

Fibre Channel — simplicity
Automated self-optimization for maximum efficiency

With Lenovo Fibre Channel, simplicity is built into the fabric. Its autonomous operation and streamlined management eliminate constant manual effort, freeing up IT resources. Unlike IP-based storage solutions that require multiple configuration steps for discovery, complex virtual machine management, and manual reconnection after network disruptions, Lenovo Fibre Channel operates as an intelligent, self-managing fabric that handles these tasks automatically and transparently—allowing IT resources to focus on business innovation rather than infrastructure maintenance.

When your IT teams are stretched thin and need a simpler way to manage your network, Lenovo Fibre Channel is the right choice.

✓ **Autonomous fabric operation**
Autodiscovers devices and self-organizes without requiring manual discovery protocols, QoS setup, or traffic policing configuration

✓ **Automatic recovery**
Eliminates manual interventions required by iSCSI and other IP-based protocols through seamless, automatic reconnection to storage resources

✓ **Virtual machine awareness**
Provides VM-level visibility and automatically adapts to VM mobility without reconfiguration through built-in fabric intelligence

✓ **Modern management framework**
Simplifies administration with an intuitive GUI and/or APIs to manage everything from the physical layer to application flows

✓ **End-to-end application flow visibility**
Provides complete transparency into network behavior and performance characteristics by managing every frame of an application flow

✓ **Built-in fabric services**
Reduces setup time and operational risk by ensuring server name, zoning, diagnostics, and performance monitoring are embedded and consistent

✓ **Consistent device naming and zoning**
Simplifies provisioning while reducing the risk of human error with static WWNs and structured access control

Built-in Fibre Channel features continuously monitor network health and identify potential issues before they become problems. With its autonomous operation, self-healing design, and application-aware intelligence, Lenovo Fibre Channel enables administrators to spend less time troubleshooting reactive issues and more time on strategic initiatives that drive business value.

Fibre Channel
Simplicity that works silently

By working continuously in the background to eliminate the complexity and manual effort traditionally associated with enterprise storage networking, Lenovo Fibre Channel represents the best option for enterprise storage networking.

✓ **Eliminates manual configuration tasks,** freeing up administrators' time

✓ **Enables end-to-end transparency** into network performance and behavior from host to storage

✓ **Provides transparent recovery** without administrator intervention through its self-healing architecture, dual redundant fabrics, and automatic failover

✓ **Ensures always-on data access** with forward error correction, lossless delivery, and deterministic performance

✓ **Proactively resolves issues** through advanced monitoring and alerting capabilities to identify and mitigate problems before they impact applications

✓ **Streamlines day-to-day operations** while supporting automation initiatives through intuitive GUIs and comprehensive APIs

Lenovo Fibre Channel, built with Brocade technology, delivers more than just high performance—it delivers effortless resiliency. It's the storage network you can rely on. It delivers the reliability your critical applications and data demand, with the simplicity that frees up your resources where it matters most.

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.**