

# Simple and secure

**Lenovo Gen 7 and Gen 8  
makes managing your  
environment easy**

**Enjoy a storage network that offers best-in-class  
performance, uptime, and quantum-safe security.**

**You probably find yourself dealing with the impact of new business processes, increased digital adoption, and more security vulnerabilities every day. Managing data growth, combined with the need for rock-solid reliability, and the requirement to maintain high levels of security can be cumbersome.**

Now is the time to make investments in your data center that will pay dividends for years to come. Lenovo Gen 7 and Gen 8 combined with the power of Brocade Fabric OS (FOS) version 10 delivers far more than just speed improvements.

Lenovo Gen 7 and Gen 8 technology take the pain out of protecting and managing your data center altogether. Integrated security and AI-Powered autonomous SAN technology enable a cyber-resilient network that safeguards your SAN against cyber attacks, IT disruptions, and disasters, while learning, optimizing, and healing on its own. Gen 8 takes this further, providing the ultimate quantum-safe defense and maximizing AI-driven autonomy. Read on to see what you could gain by upgrading.



## **Bulletproof reliability for always-on operations**

Lenovo Gen 7 and Gen 8 raise the bar for network availability and performance through autonomous SAN capabilities. Both generations use built-in telemetry to track, "learn", and baseline traffic patterns. This allows the SAN to make smarter decisions about traffic and congestion management and deliver high availability with consistent performance and reliability. Gen 8 further enhances this with advanced AI-powered algorithms for unmatched predictive and prescriptive insights. If an event occurs that may risk application performance, the SAN works intelligently with end devices to pinpoint and resolve issues, in many cases, without human intervention and much faster than a human could respond. For example, if a credit-stall results in slowed traffic between devices, the SAN can autonomously take immediate action to identify and quarantine the misbehaving device while redirecting traffic flows to resume normal operation.



## Integrated security protects operations

Fibre Channel fabrics are secure by design, based on controlled access between servers and storage, and isolation within the data center. Both Gen 7 and Gen 8 technology provide integrated security that further reduces vulnerabilities from malware and hijacking attacks by automatically validating the integrity of the switch operating system, security settings, and hardware.

For a quantum-safe architecture, Gen 8 and Fabric OS (FOS) enable the next evolution of integrated security, automatically providing the added level of security that's needed to ensure your operations are protected. Additional security enhancements validate the integrity and security of your Lenovo SAN hardware and software. For Gen 7 and Gen 8, security features are turned on automatically, including Secure Boot, Brocade Trusted FOS

(TruFOS) Certificates, FOS hardening with removal of root access, and automated distribution of SSL certificates via Brocade SANnav Management Portal. Brocade TruFOS Certificates ensure that enterprises running Brocade technology and switches are currently covered by support, validated, and securely enabled to perform critical operations without having to worry about whether the operating system has been tampered with.



## Easy management and control

Lenovo Gen 7 and Gen 8 minimizes active management to maintain optimal conditions in the SAN. AI-Powered Autonomous SAN technology equips your infrastructure with the tools and insight to solve many common issues on its own, and self-optimize to maximize performance.

Gen 8 features, like SAN Fabric Intelligence (SAN FI), extend this capability by providing richer, more actionable insights than ever before. If an issue occurs that the SAN can't resolve autonomously, it will first mitigate the impact then provide clear guidance about the cause and the remediation required, enabling you to fix it as soon as practically possible with minimal impact to business applications. Lenovo also provides easy-to-use tools to help you manage a single switch or your whole fabric at once, from deployment to configuration and ad hoc management.

- **Brocade® Webtools** is a product that is embedded into the Fabric OS firmware. Ideal for small environments, it provides a new and improved Java-free GUI for fast, and easy management of individual switches or small fabrics. It can be launched directly from a web browser or accessed via the Brocade SANnav Management Portal mentioned below.

- **Brocade® SANnav Management Portal** is the preferred option for medium or larger environments as it provides a complete view of the network including traffic flows and health conditions across the SAN. Its intuitive, drill down interface leverages Gen 7 Autonomous SAN technology (further enhanced with Gen 8 SAN Fabric Intelligence) and presents data in clear dashboards enabling a faster, more comprehensive SAN management experience. It also streamlines management workflows to accelerate the deployment of new applications, switches, hosts, and targets.

In addition, security features are built into Brocade SANnav Management Portal to help administrators protect their network. With Brocade SANnav, administrators can set up monitoring and alerting for security configuration changes, customize security thresholds, give proper access control to individual admins, view switch security events, and automatically distributing SSL certificates across the SAN to ensure authenticity and encryption settings.



## Flexibility for true investment protection

With Gen 7 and Gen 8, you can get the most out of the infrastructure you have now while easing your migration to new storage technologies. Gen 7 delivers 64G speeds and ultra-low latency, but Gen 8 elevates performance with 128G speed for the maximum instant boost. This technology provides the necessary performance for Storage Class Memory (SCM), All Flash Arrays (AFAs), or NVMe.

Not yet ready to modernize your entire network? Lenovo Gen 7 and Gen 8 allow you to run multiple generations of SAN technology without sacrificing performance. They are backwards compatible with 8G, 16G, and 32G

Fibre Channel solutions. You can also seamlessly run NVMe and SCSI concurrently on the same network for migration at your pace, or as your business demands. To support this, Traffic Optimizer, a key feature of Gen 7, automates the segregation of traffic by characteristics such as speed or protocol. Gen 8 further enhances this with Adaptive Traffic Optimizer, which dynamically adapts to changing traffic. This optimizes the performance of the network and eliminates the risk of oversubscription or congestion issues caused by mismatched speeds while allowing you to upgrade your infrastructure as your time and budget allows.



## Gain much deeper insight into your SAN

Take advantage of Gen 7 and Gen 8 with FOS 10 tools for faster, in-depth analysis of the health and performance of your SAN. Providing comprehensive data collection and advanced analytics, these tools speed the identification of issues and recognize patterns that require attention—they're the foundation of a self-learning, self-optimizing, and self-healing autonomous SAN. Gen 8 further enhances this foundation with SAN Fabric Intelligence (SAN FI), simplifying complex telemetry into actionable, AI-powered insights.

- **Monitoring and Alerting Policy Suite (MAPS)**

Using prebuilt, pre-validated rule and policy-based templates, MAPS takes the guesswork out of defining appropriate rules and actions, simplifying threshold configuration, monitoring, and alerting.

- **Fabric Performance Impact (FPI) Monitoring**

Takes predefined MAPS policies and automatically detects which devices are causing congestion or are impacted by the congested port, and quarantines those devices that are misbehaving.

- **IO Insight**

Proactively monitors I/O performance and behavior data points through integrated network sensors to set baseline application performance and ensure operational stability.

- **VM Insight**

An integrated tool that is an extension of IO Insight, VM Insight enables the same visibility of IO statistics with granularity all the way down to the virtual machine (VM) level. With the latest FOS, storage admins will have visibility into performance issues of individual VMs across the fabric regardless.



# Upgrade to a Fabric Intelligent, Quantum-Safe SAN

Legacy infrastructure can limit performance gains from next-generation technologies and leave you exposed to cybersecurity vulnerabilities. Addressing technology obsolescence by simply adding faster switching technology is not enough. Your SAN needs to be able to act autonomously to quickly and efficiently maintain optimal conditions, maximize the performance of your storage resources, and ensure the highest levels of resiliency.

Lenovo Gen 7 and Gen 8 Fibre Channel solutions transform your current storage network into an autonomous SAN. Gen 8 hardens your SAN against cybersecurity and other business continuity challenges by providing the ultimate quantum-safe architecture and Fabric Intelligence autonomy. When combined with Brocade FOS 10, Gen 7 and Gen 8 built-in autonomous SAN capabilities monitors application and network performance and takes action to resolve issues and optimize application performance for the highest availability and reliability.

## Make the Smart, Future-Proof Choice for Your Data Center

**Set up a call today to discuss your specific needs and the benefits of Lenovo Gen 7 and Gen 8 with our data experts.**

[Schedule now](#)

