

# Transform your business with a cyber-resilient, autonomous SAN

**Upgrade to the  
Lenovo X7 Director today**

The Brocade<sup>®</sup> Gen 5 (16G) DCX 8510 Director has reached End-of-Life (EOL) and is already well past the Brocade Fabric OS<sup>®</sup> (FOS) End-of-Availability (EOA). With End-of-Support (EOS) approaching, now is the time to start the upgrade process to the Lenovo X7 Director.

#### **Brocade DCX 8510 Director EOL Dates**

EOL: **October 31, 2019**

Brocade FOS EOA: **April 30, 2023**

EOS: **April 30, 2025**

Besides the increased risk of downtime, halt on enhancements and a lack of security updates after EOL, maintaining aging networking infrastructure in your data center may be riskier than you think. Older technology was not designed to handle the demands of next-gen servers and storage arrays, which can result in capacity overloads, traffic bottlenecks and security exposures. Even if you have EOL Gen 5 Directors covered by a support contract until early 2025, the risk of the hardware failing due to the effects of heat, vibration, and dust buildup over time is a reality. More importantly, FOS EOA products are not able to run the latest versions of firmware, exposing your data center to security vulnerabilities.

If you are running Brocade DCX 8510 Directors in your data center, you need to take action to safeguard the ongoing security and availability of your critical applications. By modernizing the storage network with Lenovo Gen 7, organizations will benefit from a faster, more intelligent and more resilient network with lower latency, predictable performance, and autonomous SAN technology. Upgrading to the Lenovo X7 Director provides access to the latest versions of Fabric OS (FOS), ensuring that critical features are in place to strengthen your network security for protection against threats and cyber attacks.

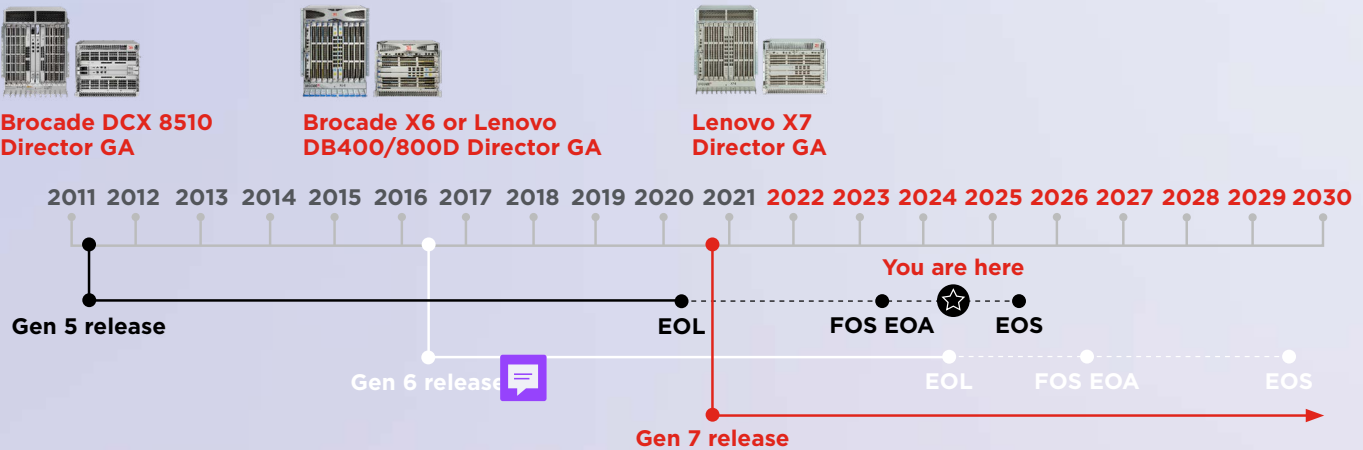
#### **What happens at Fabric OS<sup>®</sup> EOA?**

Brocade engineering identifies hundreds of security threats every year and provides patches to address these vulnerabilities. Once FOS EOA arrives, there will be no further scheduled releases of FOS with bug fixes or improvements made available for the director. More importantly, the scheduled FOS patches for any recent security vulnerabilities will not be available, potentially compromising the security profile of the entire SAN environment and leaving your data exposed.

#### **What does EOS mean?**

Broadcom will no longer support or troubleshoot any product that is EOS. For customers running a multiple-device fabric, if the Brocade Technical Assistance Center (TAC) confirms that there is an EOS product in the fabric, TAC will not troubleshoot the fabric until the EOS product has been removed from the fabric. Additionally, EOS products are no longer entitled to access software updates, bug fixes, or patches on the Lenovo and Brocade software portal.

# Running Gen 5 or Gen 6 technology? Your director might be older than you think.



## What are the risks if you wait to upgrade?



### Reliability issues

Over time, heat, vibration, and dust impact hardware reliability, which could cause disruptions or failures.



### Interoperability issues

With older SAN products, new servers and storage may not be compatible or may be limited to a subset of features.



### Security vulnerabilities

Patches to any recent security vulnerabilities will become limited over time, leaving you with operational, financial, and legal exposure.



### Performance impact

EOL infrastructure can impede the performance capabilities of evolving workloads and NVMe-based storage. Gen 5 technology was released over 13 years ago and the Gen 6 technology was released over 8 years ago.

## Legacy technologies were not designed for the demands of today's on-demand data center. Make the move to Gen 7.

Now is the time to take control of your data center with Lenovo Gen 7 products, enabling a cyber-resilient network that acts autonomously to quickly and efficiently maintain the highest levels of resiliency and security while maximizing performance.

Complexity and high-performing endpoints will soon make it impossible to identify exactly where and why problems are occurring in your SAN. With Lenovo Gen 7 technology, your SAN can now tell you where a problem came from when it matters most, and even when it has fixed the issue. Thanks to its built-in autonomous SAN

capabilities, Lenovo Gen 7 not only monitors application and network performance, it can also take action to resolve issues and optimize application performance for the highest availability and reliability. For those customers who prefer to take corrective action manually, the SAN will send alerts about any misbehaving devices so that corrective action can be taken quickly and efficiently.

In addition, Lenovo Gen 7 was designed with security in mind and implements many security measures to protect an organization against vulnerabilities. It hardens your

SAN against cybersecurity risks and other business-continuity challenges that threaten to disrupt data center operations.

Upgrade your infrastructure to transform your current storage network into a cyber-resilient, autonomous SAN. Automate administrative routines and processes, and remove the risks of legacy technology exposing you to unwanted vulnerabilities and disruptions. Take advantage of dramatic savings in the time typically spent troubleshooting issues, optimizing application performance, and maintaining high levels of security.

## Why should you upgrade?



### Security

Increase security for critical data and lower vulnerability risks.



### Simplicity

Automate actions to simplify management and resolve issues without intervention for a more resilient network.



### Optimization

With Traffic Optimizer, data flows are organized by similar latency, throughput, and performance characteristics so they share the same dedicated resources.



### Performance

Support more applications and VMs per director, while optimizing NVMe performance.



### Longer life

Protect your investment with longer usable life; mix and match blades to support older generation storage down to 4G.



### Reliability

Ensure always-on operations with a network that learns, optimizes, and heals on its own.

## Upgrade to the Lenovo X7 Director today

Modernizing your storage network with the Lenovo X7 Director ensures high levels of security, reliability, and connectivity to high-performance storage. Data centers can consolidate and simplify the SAN fabric while driving the most out of the infrastructure, even as it rapidly scales. With data-center-proven reliability, seamless scalability, integrated analytics, and automation, the Lenovo X7 maximizes the performance, productivity, and efficiency of storage investments and resources. It is time to make the move and realize the benefits of a self-learning, self-optimizing, and self-healing autonomous SAN.

Features	DCX 8510 (Gen 5)	X6 (Gen 6)	X7 (Gen 7)
Maximum Supported Speed	16G	32G	64G
Latency (Local Switching)	700 ns (without FEC)	<780 ns (with FEC)	460 ns (with FEC)
ICL Architecture	8 slot: 32 4xGen 5 ICLs 4 slot: 16 4xGen 5 ICLs	8 slot: 32 4xGen 6 ICLs 4 slot: 16 4xGen 6 ICLs	8 slot: 32 4xGen 7 ICLs 4 slot: 16 4xGen 7 ICLs
Bandwidth per Chassis	8 slot: 10.2Tb/s 4 slot: 5.1Tb/s	8 slot: 20.5Tb/s 4 slot: 10.2Tb/s	8 slot: 39.6Tb/s 4 slot: 19.8Tb/s
Security: Trusted FOS, Hardware-Based Root of Trust, Secure Optics, Secure Licensing	X	X	Increases security of critical data, lowering risks to enterprises
Traffic Optimizer	X	X	Optimizes traffic performance by grouping like traffic and ensures slower traffic does not hinder performance
Hardware Congestion Signalling	X	X	Provides quicker and more guaranteed delivery
NVMe Telemetry	X	Port-to-port	Granularity to the LUN/storage partition
VM Insight / VMID+	X	Minimal ecosystem support	Full ecosystem support
Product Availability	EOL: October 31, 2019 FOS EOA: April 30, 2023 EOS: April 30, 2025	EOL: January 15, 2024 FOS EOA: July 15, 2026 EOS: July 15, 2029	Available since September 2020

Visit the [Lenovo Gen 7 Directors Product Guide](#)

Set up a call today to discuss your specific needs with our data experts

