

**VDURA**

# The VDURA Data Platform

## Elevating Data Storage for AI and HPC



# Contents

VDURA for AI and HPC .....	1
The VDURA Data Platform .....	1
Performance and Durability Redefined .....	2
Scalability for the Modern Enterprise .....	2
A Competitive Edge .....	2
Comprehensive Data Services .....	3
Deployment Flexibility .....	3
Scalability and Efficiency .....	3
Where Velocity Meets Durability .....	3

## VDURA for AI and HPC

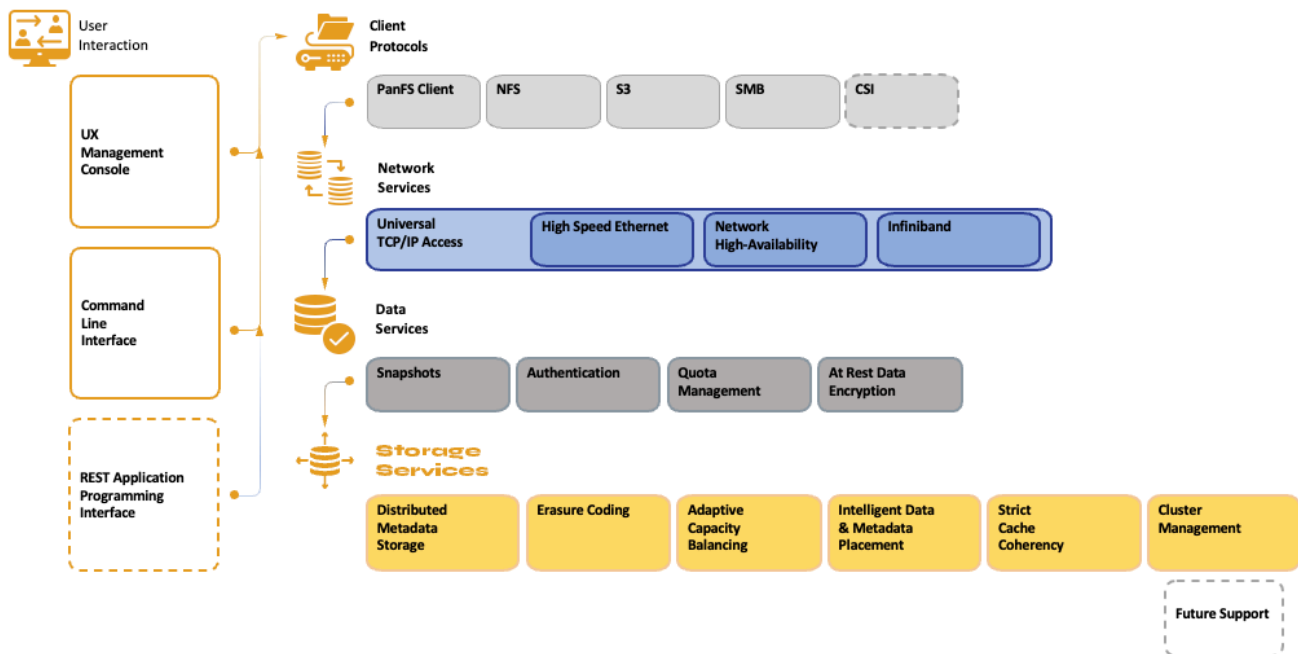
In the age of data-driven innovation, enterprises face increasing demands to store, manage, and access vast amounts of data efficiently. The rapid advancements in Artificial Intelligence (AI) and High-Performance Computing (HPC) are pushing the boundaries of what traditional storage systems can handle. To stay ahead, organizations need a storage solution that not only meets current needs but also scales for growing demands. VDURA® is that solution—a next-generation data platform designed to deliver unparalleled performance, durability, and scalability.

## The VDURA Data Platform

VDURA is a comprehensive data storage and management solution engineered to address the rigorous requirements of AI and HPC workloads. Unlike traditional storage solutions, VDURA is built with a modern, shared-nothing scale-out architecture that leverages hyperscale-optimized storage devices. This architecture ensures superior performance, unmatched data durability, and cost-effectiveness, making VDURA the ideal choice for enterprises navigating today’s complex data landscape.

At its core, VDURA is a single, cohesive platform with a unified user interface, streamlining deployment and management across various environments. VDURA adapts seamlessly to meet the unique needs of each organization.

### VDURA Global Namespace





## Performance and Durability Redefined

VDURA sets a new standard in data durability and performance. Its innovative architecture is designed to handle the most demanding workloads, delivering enterprise-grade reliability with the ease of use of traditional systems, yet with significantly greater scalability.

VDURA features best in class durability technology, which achieves up to 11 nines (99.999999999%) of data durability at petabyte scale. This level of resilience ensures that even the most data-sensitive industries, such as financial services and healthcare, can rely on VDURA to protect critical assets.

Performance is another area where VDURA excels. The platform's ability to deliver high throughput and low latency, combined with its intelligent data placement strategies, ensures that enterprises can maintain peak performance even as data volumes grow. VDURA is a leader for AI and HPC workloads, where data-intensive operations are the norm.

## Scalability for the Modern Enterprise

As data continues to grow exponentially, scalability becomes a crucial factor in any storage solution. VDURA's architecture is inherently scalable, supporting deployments with up to 1,500 nodes in a single namespace. This massive scalability allows organizations to expand storage infrastructure without compromising on performance or data availability.

VDURA's approach to scalability is unique in that it improves data availability and durability as the system grows. Unlike traditional RAID-based systems that can suffer from performance bottlenecks during recovery processes, VDURA's client-driven erasure coding ensures that recovery efforts leverage the full power of the system, minimizing downtime and preventing data access disruptions.

This scalability is particularly beneficial for industries such as manufacturing, academic research, and energy, where large-scale data processing is a daily requirement. VDURA's ability to scale seamlessly ensures that these organizations can continue to operate efficiently, even as data needs evolve.

## A Competitive Edge

In the competitive landscape of high-performance storage, VDURA distinguishes itself through a combination of high performance, durability, ease of use, and superior scalability.

VDURA is often described as the "easy button" for high-performance storage. Its intuitive user interface and robust management capabilities make it accessible to organizations that may not have extensive in-house storage expertise. Ease of use, combined with VDURA's advanced features, provides a compelling value proposition for enterprises looking to simplify storage operations without sacrificing performance.

VDURA's commitment to continuous innovation ensures that it remains at the cutting edge of the industry. The platform's transition from a hardware-centric to a software-focused model has accelerated innovation, enabling VDURA to deliver new features and enhancements at a rapid pace.

## Comprehensive Data Services

VDURA's commitment to data management extends beyond performance and scalability. The platform offers a full suite of data services designed to ensure business continuity, protect data, and streamline management operations.

Snapshots, quotas and data migration are all standard features of VDURA, providing enterprises with the tools they need to manage their data effectively.

Tiered storage is another key feature of VDURA, with the platform's Dynamic Data Acceleration (DDA) technology supporting up to four different performance tiers. This ensures that data is placed on the most appropriate storage media based on its characteristics, optimizing both cost and performance.

Security is woven into every aspect of VDURA, with industry-leading AES-256 encryption for data at rest, comprehensive access controls, and detailed logging and auditing capabilities.

## Deployment Flexibility

VDURA is designed to be versatile, supporting multiple deployment models to meet the diverse needs of modern enterprises. VDURA offers the flexibility required to adapt to changing business needs.

The platform's intuitive web-based GUI and CLI simplify storage management, while integration with tools like Grafana enhances usability. VDURA's ease of use is a key differentiator, reducing the administrative burden on IT staff and enabling organizations to focus on their core business objectives.

For organizations that prefer on-premises deployments, VDURA offers certified hardware platforms that ensure tight integration and optimal performance.

## Scalability and Efficiency

VDURA's architecture allows it to scale seamlessly, supporting massive deployments without compromising performance or data availability. This makes the platform ideal for large-scale AI and HPC workloads, where scalability is critical to maintaining operational efficiency.

Efficiency is another area where VDURA shines. The platform employs a range of techniques to optimize storage utilization, including intelligent data placement, internal tiering, and thin provisioning. These features ensure that VDURA remains cost-effective while minimizing its environmental impact.

## Where Velocity Meets Durability

VDURA is redefining what is possible in data storage, offering a platform that combines performance, scalability, and ease of use that is unmatched. As the demands of AI and HPC continue to grow, VDURA is a leader, providing enterprises with the robust, flexible solutions needed to succeed in a data-driven world.

With a commitment to continuous innovation and a focus on delivering exceptional value, VDURA is not just keeping pace with the future—it's shaping it.



2680 N. First St.  
Suite 150  
San Jose, CA 95134

+1.888.726.2727  
[info@VDURA.com](mailto:info@VDURA.com)  
[www.VDURA.com](http://www.VDURA.com)