

# **PRODUCT BROCHURE**



# **ES7KX®** WORLD'S FASTEST ENTRY-LEVEL LUSTRE APPLIANCE

World's fastest entry-level Lustre\* solution delivers easy migration to parallel file systems Highest Performance and Density • Intel® Enterprise Edition Lustre



The World's Fastest Entry-Level Lustre Appliance

### **Start Small**

- Base building block configuration of up to 144 drives in 8U
- Up to 12GB/s in 8U higher performance at smaller footprint than closest competitor
- Proven, easy to deploy, converged Lustre solution

### Scale Up and Out

- Up to 6.2PB per rack, capable of spanning multiple racks
- Up to 60GB/s per rack, capable of spanning multiple racks

Organizations with high performance workflows find their productivity is capped by how quickly they can access data. Breakthroughs in research, oil and gas, financial services, manufacturing and big data applications require massive throughput and highly parallel access that are challenging traditional SAN and NAS storage technologies.

Ideally, these challenges would be addressed with a data infrastructure solution that:

- · Is simple to install, configure, manage and, scales linearly
- Delivers massive storage performance density at scale
- Automatically unifies data across different storage types
- Offers the flexibility of open source with the security of a standard supported product

# INTRODUCING THE WORLD'S FASTEST ENTRY LEVEL LUSTRE APPLIANCE

Parallel file systems offer a higher performance alternative to traditional SAN and NAS architectures, but organizations attempting to deploy white box storage cobbled together with open source file systems are running into deployment, management, performance and scaling challenges.

Ideally, parallel file system solutions would have the extreme performance of a reliable and proven open source parallel file system with exclusive performance and stability features, and support combined in a high throughput all-in-one appliance enabling high performance and density at scale.

DDN, sells, installs and supports more Lustre than any other storage vendor, and is the #1 reseller of Intel® Enterprise Edition for Lustre (IEEL). DDN's EXAScaler® family of massively scalable Lustre appliances deliver enterprise grade reliability and support combined with extreme-scale open source innovations.

EXAScaler combines Lustre performance and scalability with DDN-unique features to deliver: ease of install and configuration, drive-to-file system monitoring, DDN-only performance features for accelerated metadata, and unified data across different storage types.

The ES7K is the world's fastest and densest entry-level Lustre appliance. Delivering 1.5GB/s per rack unit\* and 147TB per rack unit\*, the ES7KX is the perfect system for moving your most demanding applications to a parallel file system infrastructure. Not only does the ES7KX outperform its closest competitors by almost 3X, it also has all the usability features and support of the mature EXAScaler product family (ES12KX and ES14KX).

\* - industry standard 42U rack

# **ES7K ADVANTAGES**

Open source and fully supported parallel file system appliance

Start small and scale non-disruptively by adding ES7K systems as building blocks

High availability and reliability with no single point failure

 $\label{thm:local_maximizes} \mbox{ROI by delivering highest performance and density per U for data intensive environments}$ 

Arrives at your door as a fully configured appliance, simplifying setup and deployment

Simplify management across cloud, and enable multisite collaboration

Risk-free, tried, tested and proven open source Lustre based solution

DDN exclusive performance and management capabilities that deliver unrivaled Lustre storage solution

Conveniently packaged in scalable building blocks, delivering optimized CAPEX/OPEX and performance at scale

## ES7K CONFIGURATIONS

#### START SMALL AND SCALE ON DEMAND



Performance



Scale out ES7KX

310TB-1.02PB HDD 238TB -926TB SSD

12GB/s

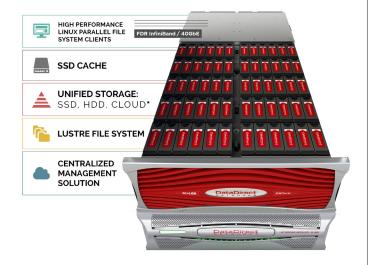
1.02PB-6.2PB HDD 926TB-4.76PB SSD

36 - 40

Up to 60GB/s / Rack

#### **UNIFIED DATA ACROSS EVERY TIER**

5GB/s



# TECHNICAL SPECIFICATIONS

Linux Parallel FS Clients **PROTOCOLS** 

12GB/sec per 8U ES7KX **PERFORMANCE** 

4 x 56Gb/s FDR InfiniBand Ports or 4 x 40GbE, STORAGE HOST PORTS:

additional 4 x 10GbE

SSD, performance SAS and capacity SAS DRIVE SUPPORT Drives, 3.5" up to 144 Drives per 8U Devices

2 OSSs and 2 MDSs

FILE SERVERS PER **BASE ENCLOSURE** 

RAID 1/5/6 DATA PROTECTION

DirectProtect and DirectProtect+

DATA AND SYSTEM Online File System Growth

MANAGEMENT Distributed Lock Management

Monitoring and Event Notification

Fine-Grained Locking CONCURRENT ACCESS

Many-to-One and One-to-Many Client-to-Gateway

CLIENT SIDE LOAD

**BALANCING & FAILOVER** 

Yes. Active-Active and Active-Passive Failover

DirectMon Centralized Administrative Monitoring SYSTEM MANAGEMENT

solution

FOR MORE INFORMATION VISIT: http://ddn.com/products/es7k-fastest-entry-level-lustre-appliance/

## **ABOUT DDN®**

DataDirect Networks (DDN) is the world's leading big data storage supplier to data-intensive, global organizations. DDN has designed, developed, deployed, and optimized systems, software, and solutions that enable enterprises, service providers, research facilities, and government agencies to generate more value and to accelerate time to insight from their data and information, on premise and in the cloud. For more information, visit our website www.ddn.com or call 1-800-837-2298.