

# EMC ISILON NL-SERIES



EMC Isilon NL400



EMC Isilon 36NL, 72NL, 108NL

The challenge of cost-effectively storing and managing data is an ever-growing concern. You also have to weigh the cost of storing certain aging data sets against the need for quick access. Meeting this challenge requires a solution that bridges the gap between high-performance but costly, primary storage and inexpensive, but management-intensive, off-line storage solutions.

The Isilon NL-Series scale-out storage solution redefines the economics of nearline storage by combining near-primary accessibility, near-tape value and ease of use.

**High Value:** The EMC Isilon NL-Series is built for highly flexible, cost-effective, large-capacity storage. Each EMC Isilon NL node houses 36 SATA Hard Disk Drives (1TB, 2TB or 3TB) in a 4U chassis, allowing you to seamlessly scale up to 15.5 PB in a single file system.

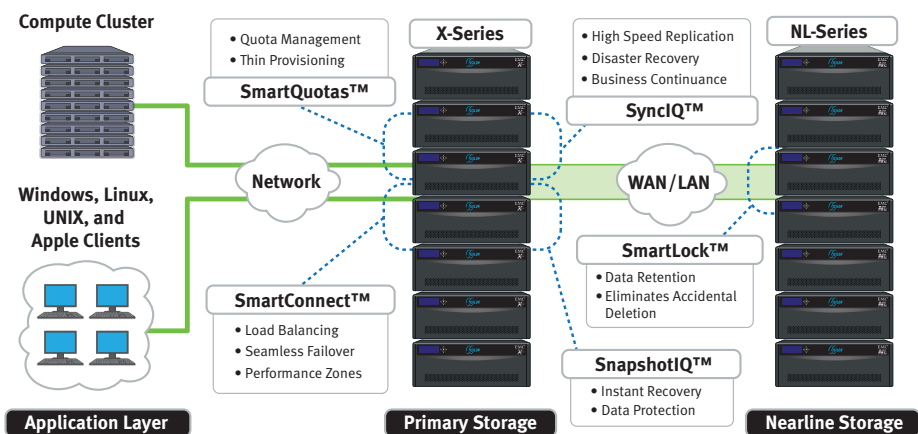
**Simplicity:** You can configure and bring an EMC Isilon NL-Series cluster online in as little as 10 minutes. With a single pool of storage with a global namespace—the NL-Series eliminates the need for multiple volumes, thereby greatly simplifying the management of your big data environment.

**Breakthrough Efficiency and Economics:** The NL-Series offers the ultimate in storage economics with low acquisition costs and ultra-low overhead. With EMC Isilon, you can achieve highly efficient utilization rates—over 80 percent versus 50 percent for traditional NAS or SAN storage. This means you need fewer spindles to provide the same amount of usable storage.

## Specifications

### ARCHITECTURE

#### EMC ISILON NL-SERIES SCALE-OUT STORAGE ARCHITECTURE



## NL-SERIES NODE SPECIFICATIONS

Node Attributes & Options	36NL	72NL	108NL	NL400		
				1 TB	2 TB	3 TB
Capacity	36 TB	72 TB	108 TB	36 TB	72 TB	108 TB
Hard Drives (3.5" SATA-2)	36 (1 TB)	36 (2 TB)	36 (3 TB)	36	36	36
ECC Memory (FBDiMM cache)	4 GB	4 GB	16 GB	12 – 48 GB	12 – 48 GB	12 – 48 GB
Front-end Networking	4 x Gigabit Ethernet OR 2 x Gigabit Ethernet & 2 x 10GE (SFP+ or Twin-ax Copper)					
CPU Type	Intel® Xeon® Processor E5 Family					
Infrastructure Networking	2 InfiniBand connections with double data rate (DDR) or quad data rate (QDR) links					
Non-volatile RAM (NVRAM)	512 MB					
Typical Power Consumption @ 100v	8.0 A					
Typical Power Consumption @ 240v	3.0 A					
Typical Thermal Rating	2,500 BTU/hr					

## PRODUCT ATTRIBUTES

Scale-out Architecture	Truly distributed, fully symmetric clustered architecture that combines modular storage nodes with EMC Isilon Data and Storage management software.
Modular Design	Self-contained nodes include server, software, and disks in a 4U rack-mountable node.
Operating System	EMC Isilon® OneFS® distributed file system. Creates a cluster with a single file system and single global namespace. Fully journaled, fully distributed globally coherent write/read cache.
High Availability	No single point of failure. Self-healing design protects against disk or node failure. Includes backend intra-cluster failover.
Scalability	Initial cluster setup in less than 10 minutes. Add performance and capacity in 60 seconds. Scales up to 15.5 PB per cluster.
Data Protection	FlexProtect file-level striping with support for N+1 through N+4 and mirroring data protection schemes.
Data Replication	Replicate and distribute large, mission-critical data sets to multiple shared storage systems in multiple sites for reliable disaster recovery capability with EMC Isilon SyncIQ.
Data Retention	Protect data against accidental, premature or malicious alteration or deletion with EMC Isilon SmartLock, our software-based approach to Write Once Read Many (WORM).
Network Protocol Support	NFSv3, NFSv4, NFS Kerberized Sessions (UDP or TCP), iSCSI, SMB1 (CIFS), SMB2, HTTP, FTP, NDMP, SNMP, LDAP, ADS, NIS reads/writes, HDFS
Client Support	Microsoft® Windows®, Linux, UNIX, Apple® Macintosh.
Isilon Software Compatibility	Compatible with all Isilon licensable software: SmartLock™, Isilon for vCenter™, SyncIQ™, SnapshotIQ™, SmartConnect™, SmartQuotas™, SmartPools™, InsightIQ™ and Aspera for Isilon

## ENVIRONMENTAL SPECIFICATIONS

Power Supply	Dual redundant, hot-swappable 1200W (1050W for NL400) power supplies with Power Factor Correction (PFC)
Operating Environment	50° F to 95° F (10° C to 35° C), 5% to 95% relative humidity, non-condensing
Dimension/Weight	Height: 6.96" (17.7 cm), Width: 18.9" (48 cm), Depth: 31.25" (79.4 cm), Weight: 130 lbs / 59 kg (118 lbs. / 54kg for NL400)
Minimum Service Clearances	Front: 35" (88.9 cm), Rear: 14" (35.6 cm)

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