



# Dell | EMC NS-480 Unified Storage

The Dell / EMC NS-480 is a powerful and scalable unified storage system that scales to 480 drives and provides the capacity and performance that is required to consolidate all your business application storage onto a single system. The NS-480 unified storage offers integrated file and block storage for both file management for Windows® and Linux/UNIX environments and FC and iSCSI connectivity for business critical applications.

## Pay only for what you need with consolidated application data in a single system

The Dell / EMC NS-480 offers an excellent combination of performance, flexibility, and scalability for users with high availability requirements. It is well suited for demanding file and block workloads or other applications that benefit from array-based replication. The adaptability offered with this highly scalable storage array helps protect your company's bottom line by allowing your storage infrastructure to scale to meet your needs today and tomorrow. Also, the Dell / EMC NS-480 enables your users in Windows, Linux, and UNIX environments to share files easily and efficiently.

As your storage needs grow, the Dell / EMC NS-480 can add processing and capacity to match your growing business, while helping you save administrative time and lower costs. The NS-480 removes unnecessary costs associated with multiple systems, duplicate data and over-provisioning.

## Simplify how you manage your storage to save time

Your most valuable resource is your time. The Dell / EMC NS-480 saves time by automating setup with simple, web-based management for discovery, monitoring and provisioning of your NS-480 system, which helps increase storage utilization, improve backup and restore, and migrate data more easily. The Celerra Startup Assistant helps you get your NS-480 powered up and sharing files on the network quickly and easily.

You can even provision a file system by workload in only four clicks without sacrificing enterprise-class functionality through Automated Volume Management.

Prioritize the right kind of data on the right level of storage through Fully Automated Storage Tiering (FAST). FAST for Block LUNs transparently relocates files to the appropriate storage (Enterprise Flash, FC, or SATA) from your pre-set policies, so that performance goals can be met and your data remains a strategic part of your business.

## Be ready for anything with NAS, iSCSI and Fibre Channel Connectivity

You should not have to force fit new solutions into your existing environment. The Dell / EMC NS-480 supports a wide variety of connectivity options and fits easily into the infrastructure you already have. Whether your business applications require NAS, iSCSI, or Fibre Channel (FC) connectivity, a unified storage system like the Dell / EMC NS-480 can consolidate file and block storage, bring stranded application servers under control, and simplify administration with just one system to manage.

## Enterprise availability & data protection

Your data is the livelihood of your organization, and it deserves to be stored on something trustworthy. The Dell / EMC NS-480 is designed to bring both your file and block storage the no-compromise availability that you need in your business operations. The NS-480 system supports the Data Access in Real Time (DART) operating system. DART's sophisticated file management mechanisms ensure that data is highly available and protected, offering dynamic failover to a hot standby X-Blade — which means the NS-480 can continue to meet the performance expectations of your business applications.

The Dell / EMC NS-480 offers a number of easy to use features that help users establish greater levels of protection and availability. Celerra SnapSure™ software creates copies of file systems and iSCSI LUNs for online backups and fast recovery of deleted files. Optional Celerra Replicator™ software creates a point-in-time, read-only/read-write copy of a production file system on a local or remote system, providing multi-site protection. The Celerra FileMover API provides simple data tiering and integration with backup and archiving. Mix application or workload environments to meet your tiered storage needs, and move files between tiers of storage automatically, based on policies.

## Optimize storage utilization with thin provisioning

With the Dell / EMC NS-480, utilize thin provisioning to help reduce acquisition and operational costs while improving capacity utilization. This can result in fewer drives and reduce hardware costs, management time, and power consumption. The Dell / EMC NS-480 also supports Automatic File System extension and Dynamic iSCSI LUN extensions that allow you to increase physical allocation on the fly, as needed.

## Increase storage efficiency with file deduplication and compression

Intelligently reduce your primary storage space by getting your unstructured file data under control. The Dell / EMC NS-480 combines file-level deduplication and compression with an integrated policy engine that works in the background, transparently monitoring file activity and attributes to help ensure that performance is not compromised, compressing files with low activity and single-instancing files to remove duplicates. The Dell / EMC NS-480 is designed to maximize storage savings while lowering resource usage – which can be as much as 50% for typical unstructured file share datasets.

## Service and support\*

A well-planned, protected and maintained storage environment can support growing data requirements without increasing costs and complexity. Dell Infrastructure Consulting can help design storage infrastructure to satisfy data availability, retention, and recovery requirements without upsetting your budget.

Having the right level of support when you need it is also important. Get rapid response, reduced risk and complexity and protection of your sensitive data with Dell's ProSupport 100% configurable suite of comprehensive and easy-to-understand professional services. ProSupport support options address everyday IT challenges, from stolen laptops to data protection to unplanned downtime, backed by Global Command Centers.

\*Availability and terms of Dell Services vary by region. For more information, visit [www.dell.com/servicesdescriptions](http://www.dell.com/servicesdescriptions).

Features	Dell   EMC NS-480 Unified Storage
Description	Integrated file and block storage system that offers both file management for Windows® and Linux/UNIX environments and FC and iSCSI connectivity for business critical applications.
Operating System	DART
File Access Protocols	CIFS, NFS, FTP, FTP Secure
Block Access Protocols	iSCSI, Fibre Channel
Form Factor	8U Rack mounted
Processors	Data Movers: 2 or 4 X-Blades Storage Processors: 2
Memory	Data Movers: 4GB each Storage Processor: 8GB each
RAID Type	Hardware
HW Raid Levels	0/1, 5, and 6
Maximum Storage Expansion	Maximum drives: 480 Maximum drive capacity: 2TB SATA Maximum Disk Array Enclosures: 32
Drives Supported	EFD, FC, SATA
Hardware Redundancy	Hot-Swappable Drives: Yes Power Supplies/Fans: Yes I/O Subsystem: Yes X-Blades: Yes
Systems Management	Unisphere for Celerra
Remote Management	Unisphere
Bundled Software	Celerra Manager-Basic, Celerra SnapSure™, Virtual Provisioning, Celerra Data Deduplication, NDMP support
Optional Software	Optional File Storage Software: Celerra Anti-virus, Celerra Replicator, Celerra Manager Advanced Edition, Celerra File Level Retention, FAST, Fast Cache and LUN Compression Optional Application Storage Software: Navisphere Manager, SnapView™, SAN Copy™, MirrorView™, Thin Provisioning
Dimensions	NS-480 with one Disk Array Enclosure Height: 40.0 cm (15.75") Width: 48.06 cm (18.92") Depth: 80.21 cm (31.58") Additional Disk Array Enclosures: Height: 22.15 cm (8.71") Width: 48.06 cm (18.92") Depth: 80.21 cm (31.58")
Weight	NS-480 with one Disk Array Enclosure 92.4 kg (203.3 lbs.) Additional Disk Array Enclosures: 30.8kg (68.0 lbs.)
AC Power/Max Current	NS-480 with one Disk Array Enclosure 970W Additional Disk Array Enclosures: 365W
Environmental	Operating Temperature: 10° to 40° C (50°-104° F) Operating Relative Humidity: 20% to 80% (non-condensing) Operating Altitude: 3048 m (10,000 ft.) @ 98.6 degrees F (37 degrees C max)

Simplify your storage at [Dell.com/emc](http://Dell.com/emc)

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