

# DELL™ NX4



Dell NX4 enterprise-class Network Attached Storage offers an advanced file system for Windows® and Linux®/UNIX™ environments and the flexibility to support stranded application servers via iSCSI or Fibre Channel.



## **SEAMLESS FILE SHARING IN WINDOWS, LINUX, AND UNIX ENVIRONMENTS**

Now your users in Windows, Linux, and UNIX environments can share files easily and efficiently.

Dell NX4 Network Attached Storage is an exceptionally flexible, enterprise-class file storage solution that can help you save administrative time and lower costs in your mixed file-protocol environment.

Dell NX4 is a pre-integrated solution that includes the Data Access in Real Time (DART) operating system. DART's sophisticated file-locking mechanisms simultaneously support NFS and CIFS protocols so that your UNIX and Windows clients can seamlessly share files without compromising data integrity.

## **SIMPLE, CENTRALIZED MANAGEMENT ADDS CONTROL AND SAVES TIME**

The Dell NX4 comes preloaded with powerful software for automated setup and simple, Web-based management for discovery, monitoring, and provisioning the system. The included feature-rich Celerra® Manager software provides intuitive Web-based management and at-a-glance system status and monitoring that helps increase storage utilization, improve backup and restore, and migrate data more easily.

Celerra Startup Assistant performs software initialization — you can be sharing files on the network in as little as 15 minutes from power-up. Celerra Automated Volume Management lets you provision a file system by workload in only four clicks. You get ease of use without sacrificing enterprise-class functionality.

## **NO-COMPROMISE AVAILABILITY**

Your file data is just as critical to your business as application data. The Dell NX4 is designed to bring network-attached storage the no-compromise availability you've come to expect for applications storage with up to 99.999% availability. The Dell NX4 can be deployed in Primary/Standby, and dynamic failover to a hot standby X-Blade with virtually no change in performance helps you achieve non-stop file access. In the event of an X-Blade failover, DART uses a metadata logging facility to help recover within seconds or minutes.

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 VIRTUAL PROVISIONING**

Prepare for future data growth now — without overinvesting in costly hardware. Celerra Virtual Provisioning lets you size file systems and iSCSI LUNs to required capacity logically, while physically provisioning them with less — so valuable storage capacity doesn't sit idly until it's required. Automatic File System extension and Dynamic iSCSI LUN extensions allow you to increase physical allocation on the fly, as needed.

Dell NX4's virtual provisioning capability helps you improve storage utilization and minimize hardware acquisition costs.

## INCREASE STORAGE EFFICIENCY WITH FILE DEDUPLICATION AND COMPRESSION

Dell™ NX4 helps you deal with the proliferation of unstructured data by combining file-level deduplication and compression to intelligently reduce storage space usage. A built-in policy engine 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. Dell NX4's innovative combination of deduplication and compression is designed to maximize storage savings while lowering resource usage — which can be as much as 30%-40% for typical unstructured file share datasets.<sup>1</sup>

## ULTRA-FLEXIBLE DEPLOYMENT, NAS, ISCSI, AND FIBRE CHANNEL CONNECTIVITY

The Dell NX4 can fit easily into existing environments because it supports NAS, iSCSI, and Fibre Channel (FC) connectivity. You can consolidate file and block storage into a single Dell NX4 system, bring stranded application servers under control, and simplify administration with just one system to manage.

## SERVICE AND SUPPORT

Dell believes that a well-planned and maintained storage infrastructure can support growing data requirements without the corresponding increase in cost and complexity. Dell can also help ensure adequate data protection in a cost-effective manner. Dell Infrastructure Consulting can help design storage infrastructure to satisfy data availability, retention, and recovery requirements. We also believe that having the right support is important.

Dell ProSupport<sup>2</sup> is a 100% configurable suite of comprehensive and easy-to-understand professional services, designed to simplify operations from desktop to data center through rapid response, protection of IT investment and sensitive data, and proactive support services that help reduce risk, cost, and complexity. ProSupport also offers a set of comprehensive support options designed to address everyday IT challenges, from stolen laptops to data protection to unplanned downtime, backed by Global Command Centers.

Many of the service investments Dell has made are available through or in conjunction with Dell's global network of PartnerDirect channel partners. For more information please visit [DELL.COM/Services](http://DELL.COM/Services) or contact your local Dell PartnerDirect Registered partner.

FEATURES	NX4 NETWORK ATTACHED STORAGE
<b>Description</b>	Advanced file management for Windows® and Linux/UNIX environments and the flexibility to help support stranded application servers via iSCSI or FC
<b>Operating System</b>	DART
<b>File Access Protocols</b>	CIFS, NFS, FTP
<b>Block Access Protocols</b>	iSCSI, Fibre Channel
<b>Form Factor</b>	5U Rackmounted
<b>Memory</b>	4GB
<b>RAID Type</b>	Hardware
<b>HW Raid Levels</b>	0/1, 5, and 6
<b>Max. Storage Expansion</b>	Drives and Raw Capacity: 60TB with 60 1TB SATA drives in 4 additional Disk Array Enclosures
<b>Drives Supported</b>	SAS, SATA
<b>Hardware Redundancy</b>	<b>Hot-Swappable Drives:</b> Yes <b>Power Supplies/Fans:</b> Yes <b>I/O Subsystem:</b> Yes <b>x-Blades:</b> Yes
<b>Systems Management</b>	Celerra® Manager
<b>Remote Management</b>	Celerra Manager
<b>Bundled Software</b>	Celerra Manager-Basic, Celerra SnapSure™, Virtual Provisioning, Celerra Data Deduplication, NDMP support
<b>Optional Software</b>	<b>Optional File Storage Software:</b> Celerra Anti-virus, Celerra Replicator, Celerra Manager Advanced Edition, Celerra File Level Retention <b>Optional Application Storage Software:</b> Navisphere® Express, Navisphere Manager, SnapView™, SAN Copy™, MirrorView™
<b>Dimensions</b>	22.15 cm (8.71") H x 48.06 cm (18.92") W x 80.21 cm (31.58") D
<b>Weight</b>	83.13 kg (182.91 lbs.)
<b>AC Power/Max Current</b>	960W
<b>Environmental</b>	<b>Operating Temperature:</b> 10° to 40° C (50°-104° F) <b>Operating Relative Humidity:</b> 20% to 80% (non-condensing) <b>Operating Altitude:</b> 3048 m (10,000 ft.) @ 98.6 degrees F (37 degrees C max)

**SIMPLIFY STORAGE AT [DELL.COM/NX4](http://DELL.COM/NX4)**



1. Based on EMC internal testing in Technical Primer: EMC Celerra 5.6 Data Deduplication October 2008.

2. Availability and terms of Dell Services vary by region. For more information, visit [DELL.COM/ServiceDescriptions](http://DELL.COM/ServiceDescriptions)