



# **Dell | EMC DD630 -**Backup To Disk with Integrated Deduplication

Many organizations are looking for ways to improve the reliability, ease and speed of their data backup and recovery. Disk-based backup is an option that can address these needs, but it faces cost and management challenges when it comes to expanding data growth and offsite protection. Data deduplication is a technology that can tackle these concerns by removing duplicate copies of data, thereby bringing the cost of disk backup closer to that of tape. The Dell|EMC DD630 is a backup to disk solution with integrated deduplication that is designed to be easy to implement, to help improve data protection and to reduce recovery time.

## Mature Solution that is Easy to Implement and Manage

You can eliminate the frustrations of backup and feel confident that your organization's most valuable asset, your data, is protected and available by deploying disk-based backup with integrated deduplication from Dell™, EMC® and Data Domain® that has been proven through more than 12,000 installed systems with 4,300 customers. Implement without redesigning your entire backup environment thanks to support for almost any backup and archive software and heterogeneous hardware. Wizard-based controls make set-up and management easy allowing you to focus time and resources on your organizational goals instead of backup.

## Improve Data Protection and Recovery Time While Lowering Costs

Disk backup with high throughput inline deduplication can help ensure that you are prepared for challenges associated with protecting your growing volumes of data. The DD630 allows you to store more data in a nearline setting for longer and in a smaller footprint than with other backup options and helps you simplify your backup environment by displacing tape, moving it from backup to long-term archive. You can achieve 90-97% backup data reduction with a typical 10-30x deduplication ratio. The DD630 is designed from the ground up around dedupe and has a variable block deduplication algorithm which helps you achieve optimal capacity savings. In addition, you can meet your organization's enterprise data compliance needs by enabling the Retention Lock and data shredding features of the DD630.

## Enhance Disaster Recovery with Efficient Replication

Be up and running faster in the event of a disaster by using the DD630 to provide network-efficient replication for disaster recovery. You can realize up to a 99% bandwidth reduction for replication, in a typical backup environment with a 5-10% incremental change rate, via the DD Series deduplication technology. Lower bandwidth costs can make replication a viable DR solution to protect your organization should the unexpected happen and can help you alleviate burdens on remote/branch offices by centralizing and automating data protection back to the main office.

### Ensure Data Integrity

The Data Domain Data Invulnerability Architecture provides one of the industry's best defenses against data integrity issues. Continuous fault detection and healing and end-to-end verification of data recoverability at time of backup protect against data integrity issues through the data life cycle. In addition, the DD630 utilizes redundant system components and a RAID 6 architecture to protect against data loss from hardware failures.

#### Flexible Deployment Options

The DD630 is easy to implement and flexible for changing needs thanks to support for several different connectivity protocols, including CIFS, NFS, NDMP, Symantec™ OpenStorage (OST) and Fibre Channel Virtual Tape Library (VTL). The Fibre Channel VTL option facilitates using the DD630 as a data vault on your FC SAN and offers full VTL functionality for seamless integration into existing backup/archive approaches. It can support up to 64 virtual tape libraries at any one time. The Symantec OST option enables deeper awareness and control of the DD630 from the Symantec console increasing management simplicity and flexibility.

#### Solutions Designed for your Unique Needs

Dell offers a suite of end-to-end consulting services to help you understand deduplication technology, quantify the benefits and design a deduplication solution to effectively meet your needs. Dell takes an enterprise-wide view of your storage infrastructure in areas of backup, recovery and archive to determine how deduplication can add value. These services are designed to help you find a "better path" to deduplication, to save time and money and reclaim your IT resources.

Feature	Dell   EMC DD630
Raw Capacity	Up to 12 TB
Logical Capacity*	Up to 168 TB
Maximum Throughput	Up to 1.1 TB/hr¹
Connectivity Options (Standard)	CIFS, NFS, NDMP
Connectivity Options (Optional)	Symantec OpenStorage, Fibre Channel VTL
Ports	2 copper 10/100/1000 Ethernet ports and optional dual port copper or optical 1 Gb Ethernet
Chassis	Rack mounted seven or twelve drive enclosure consuming only two units (2U) of rack space
Hardware Data Protection	RAID 6 and dual redundant power supplies and fans
Management	Data Domain Enterprise Manager, GUI, SNMP, and command line management interface
Included Software	Data Domain Operating System (DD OS) 4.7 or later
Included Software Features	Global Compression, Data Invulnerability Architecture including end-to-end verification (ongoing), snapshots, telnet, FTP, SSH, email alerts, scheduled capacity reclamation, Ethernet failover and aggregation
Optional Software	Replicator: Enables full suite of replication functionality Retention Lock: Enables compliance features such as WORM and data shredding Data Domain OpenStorage: Enables use of additional Symantec OST features and functionality Fibre Channel VTL: Enables using the solution as a Fibre Channel Virtual Tape Library.
Environmental	Minimum Clearances: Front, with bezel closed: 1.56" (4.0 cm); Rear: 5" (12.7 cm) Power (VA) 100-120 / 200-240 V~, 50/60 Hz 7 drives: 319 VA 12 drives: 362 VA System Thermal Rating 7 drives: 1089 BTU/hr, 301 Watts 12 drives: 1235 BTU/hr, 329 Watts Operating Temperature 10°C to 35°C (50°F to 95°F) Operating Humidity 20% to 80%, non-condensing Non-operating (Transportation) Temperature -40°C to +65°C (-40°F to +149°F) Operating Acoustic Noise Max 7.9 BA, sound power at rear of unit when all disks seek simultaneously
Dimensions	7 drives: 49 lbs (22.2 kg) 12 drives: 57 lbs (25.8 kg)
(WxDxH)	19" x 22" x 3.5" (48.3 cm x 55.9 cm x 8.9 cm) 2 EIA units
Power Dissipation	329W

<sup>\*</sup> Logical capacity is the amount of undeduplicated data that could be backed up over time with a typical 20x dedupe ratio and 8.4TB usable capacity after RAID and formatting. Different data types, change rates, duration of storage and backup schemes (full vs. incremental) will impact dedupe ratio and logical capacity.



 $<sup>^{\</sup>rm 1}$  Maximum throughput achieved using VTL interface and 4 Gbps Fibre Channel.