



# Dell DR4000 advanced disk backup and disaster recovery solution

Companies of all sizes increasingly struggle with the relentless growth of data they must manage. Essential to the business yet often redundant in nature, data can strain storage and backup processes as administrators strive to ensure data availability and integrity while still meeting capacity and backup window constraints. The Dell DR4000 deduplication and compression backup appliance can help customers to alleviate these growing problems. By removing redundant data from the backup work stream the DR4000 can drastically reduce the storage footprint, enable core backup data to remain on disk and online longer, provide faster and more reliable restores, and reduce the complexity around tape management.

## Simple, affordable solution

The DR4000 is a high-performance, disk-based backup and recovery appliance that is simple to deploy and manage, and offers unsurpassed Total Cost of Ownership benefits. Features such as innovative firmware and an all-inclusive licensing model ensure optimal functionality and the assurance of no hidden costs for desired future features. The DR4000 has a simple installation process with full, intuitive remote setup and management capabilities and is available in three logical capacity points 35TB, 70TB, and 130TB<sup>1</sup>, ideal for small enterprise and remote office environments.

## Harness the power of deduplication

Through the use of innovative Dell deduplication and compression technology, the DR4000 can achieve an expected data reduction level of 15:1. This reduction in data means less incremental storage needs and a smaller backup footprint. By removing redundant data, the DR4000 deduplication and compression appliance delivers fast, reliable backup and restore functionality, reduces media usage and power and cooling requirements and improves overall data protection and retention costs. The benefits of data deduplication can be extended across the enterprise as well – through the DR4000 deduplicated replication function – to provide a complete backup solution for multi-site environments. Shorter Recovery Time Objectives (RTO) and more attainable Recovery Point Objectives (RPO) can also be assured as critical backup data remains on disk and online longer. Capital and administrative costs are diminished at the same time as internal service level agreements (SLAs) are more easily met.

## Advanced data protection & disaster recovery

DR4000 has built in data protection safeguards in both hardware and software to verify backup integrity. The non-volatile RAM (NV-RAM) ensures data protection in case of a power loss and proactively detects corruption due to faulty hardware. The DR4000 appliance has a RAID 6 configuration, allowing for up to two simultaneous hard drive failures without service interruption. Early Write software feature validates data integrity of data and metadata.

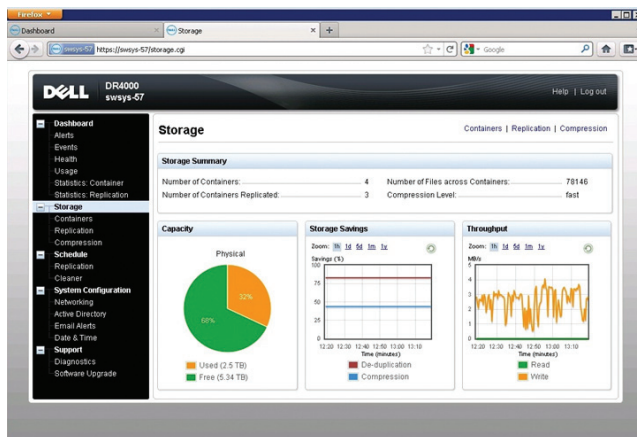
Enhanced disaster recovery capability is provided by the DR4000 through deduplicated replication. Replication enables better disaster tolerance without the operational costs associated with transporting data offsite on physical tape. Replication can be scheduled to occur during non-peak periods and prioritizes ingest data over replication data to ensure optimal back up windows. Deduplication coupled with replication minimizes the costs and inefficiencies associated with distributed backup environments.

Fast and affordable  
data reduction with  
the future built in

## Manage with simplicity

The DR4000 data reduction and target appliance is a turnkey solution designed to drop in to any backup workflow environment. Simple to install and simple to manage, the software-agnostic DR4000 supports industry-leading backup software applications, making deployment a breeze. The DR4000 enables fast, daily replication of backups, providing an easy to implement and cost effective disaster recovery solution compared to traditional tape methods. Doing so also reduces the burden on staff and eliminates tape requirements at remote offices. The result is a simple disaster recovery solution that also helps reduce capital and operational costs typically associated with backup and recovery.

Effective management is critical for obtaining full value from deduplication deployments. The DR4000 provides a graphical interface giving an overview of the system, including system status, hardware and software alerts, storage capacity and savings, and important system information such as system and software versions. The DR4000 automatically monitors the health of the hardware and verifies the integrity of the system software. The health status of the system is reported in the graphical user interface. Critical hardware and software issues are displayed in the graphical user interface and can be sent via email and SNMP traps for immediate notification. The DR4000 includes the Dell Remote Access Controller 6 (iDRAC6) Enterprise option providing full remote management including remote keyboard, mouse and video (KVM) console, remote virtual media, power control and event management. The system also provides a rich CLI (command-line interface) which can be used to script operations needed to manage the system.



<sup>1</sup>See feature table for specific capacity information

<sup>2</sup>Availability and terms of Dell Services vary by region. For more information, visit [www.dell.com/servicesdescriptions](http://www.dell.com/servicesdescriptions).

## Future-proof your data center

A cornerstone technology of the Dell Fluid Data Architecture, Dell's deduplication and compression technology found in the DR4000 delivers a data reduction and protection solution with the future built in. By accelerating and streamlining the backup process the DR4000 ensures that information restores are delivered in a timely and accurate manner – in time with business needs. Less data and less management processes frees-up administrator time to work on more strategically important initiatives, at the same time that protection against downtime and disaster has been augmented. The DR4000 changes the economics of disk-based data protection.

## Understanding the problem

Dell Services can help reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell Services team takes a holistic view of your needs and designs solutions for your environment and business objectives while leveraging proven delivery methods, local talent, and in-depth domain knowledge for the lowest TCO.<sup>2</sup>

Feature	Dell DR4000 Backup Target Appliance
Form factor	2U
Memory	32GB
Chipset	Intel® 5500
Internal storage	2 hard drives for OS (Inside chassis) 12 3.5" drives, Near Line SAS - Hardware RAID 6 Configuration (11 drives + 1 Hot Spare) 300GB or 600GB SAS or 1TB Near Line SAS Drives
Protocol support	NFS v3, CIFS, Jumbo Frame Support
Networking	4 Port 1GbE (10BaseT) or 2 Port 10GbE (10BaseT) per node
Systems management	iDrac 6 Enterprise
Physical dimensions	2U rack-mountable chassis or 26.17" (66.46cm) D x 17.53" (44.52cm) W x 3.42" (8.67cm) H with bezel attached
Rack weight	57.54 lbs. (26.1 kg), maximum configuration
Ports	Rear: 2 x USB 2.0, 1 x serial connector, 1 x video connector Front: 1 x USB 2.0, 1 x video connector
Capacity points	Available in 3 configurations: 2.7TB post-RAID (35TB logical) 5.4TB post-RAID (70TB logical) 9.0TB post-RAID (130TB logical)

Learn more at [Dell.com/deduplication](http://Dell.com/deduplication)

