Dell DR4000 advanced disk backup and disaster recovery

Companies of all sizes increasingly struggle to manage the relentless growth of data. 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 alleviate these growing problems. By removing redundant data from the backup work stream, the DR4000 can drastically reduce the storage footprint, enable backup data to remain on disk and online longer, provide faster and more reliable restores, and reduce tape management complexity.

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 provide optimal functionality and help eliminate the hidden costs of future feature upgrades. The DR4000 has a simple installation process with intuitive remote setup and management capabilities, and is available in three logical capacity points—35TB, 70TB, and 130TB[1]— 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 help achieve a data-reduction level up to 15:1. This reduction in data means more backup data can be retained longer and in the same 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 extend 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 and disaster recovery

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

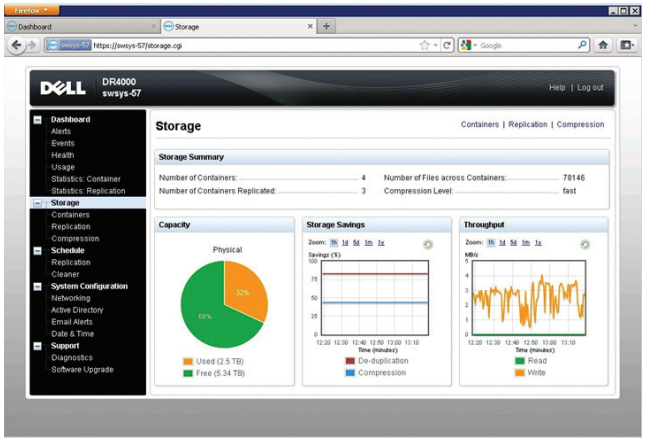
By replicating only deduped data, network bandwidth is reduced by up to 15x, and disaster recovery time is drastically improved. Replication enables better disaster tolerance without the operational costs associated with transporting data offsite on physical tape. Replication can be scheduled to occur during non-peak periods and ingest data is prioritized over replication data to help 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 compression 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. It also reduces the burden on staff and provides a simple disaster recovery solution that can help reduce capital and operational costs and minimize reliance on tape at remote offices, typically associated with backup and recovery.

Effective management is critical for obtaining full value from deduplication deployments. A graphical interface gives users 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. Critical hardware and software issues can be sent via email and SNMP traps for immediate notification. The DR4000 includes the Dell Remote Access Controller 6 (iDRAC 6) Enterprise option, providing full remote management, including a remote keyboard, mouse and video (KVM) console, remote virtual media, power control and event management. The system also provides a rich command-line interface (CLI), which can be used to script operations needed to manage the system.



Future-proof your data center

Part of the Dell Fluid Data architecture, the Dell DR4000 delivers data reduction and protection with the future built in. By accelerating and streamlining the backup process, the DR4000 helps to ensure information restores are delivered in a convenient and accurate manner—in time with business needs. Extending on-disk retention times and reducing dependency on tape frees up an administrator's time to work on more strategically important initiatives, at the same time providing enhanced protection against downtime and disaster. 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.[2]

Feature	Dell DR4000 Backup Target Appliance
Form factor	2U
Internal storage	Redundant OS storage on dedicated disks. (Inside chassis) 12 3.5' drives, Near Line SAS - Hardware RAID 6 Configuration (11 drives + 1 Hot Spare)
Protocol support	NFS v3, CIFS
Networking	4 Port 1GbE (base-T) or 2 Port 10GbE (base-T) per node
Systems management	iDRAC 6 Enterprise
Physical dimensions	2U RAC-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	63.80 lbs (29.0 kg), maximum configuration
Capacity points	Available in 3 configurations: 2.7TB post-RAID (35TB logical) 5.4TB post-RAID (70TB logical) 9.0TB post-RAID (130TB logical)
Wattage Voltage Heat Dissipation Regulatory Model	750 W (redundant power supply) 100 VAC to 240 VAC, autoranging, 50Hz to 60Hz 2450 BTU/hr (maximum) E13S Series

[1]See feature table for specific capacity information.
[2]Availability and terms of Dell Services vary by region. For more information, visit www.dell.com/servicedescriptions.
[3]Please see www.dell.com/regulatorycomplaince for more information.

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