EMC DATA DOMAIN DD140

Deduplication storage for remote office data protection

NEXT-GENERATION DATA PROTECTION

Backup and recovery of company data at its primary sites typically places high demands on the resources of a company's IT department. The result is that data protection strategies and execution are neglected at the smaller, remote sites even though information at these remote offices may be as important as that found at the primary data center. A lack of technical resources at remote sites further complicates the problem and recent advances in disk-based backup technologies have done little to provide relief. Though some of these products allow faster backup or slightly longer retention at the remote site, it still creates an "island of backup data" that is too voluminous to replicate to a primary facility for centralized management and disaster recovery purposes.

EMC® Data Domain® deduplication storage systems have revolutionized disk backup and remote office data protection with high-speed, inline deduplication. Backup data can be reduced in size by an average of 10-30x, so disk backup storage is now cost-effective for long-term onsite retention, and becomes a critical tool for consolidation of backup data across distributed enterprises.

DEDUPLICATION FOR TAPE-FREE BACKUPS AND DISASTER RECOVERY

Data Domain systems store each unique data sequence only once by substituting small references for each identical redundant sequence, saving significant physical storage capacity. Backup data is highly redundant, so it benefits greatly from deduplication. The EMC Data Domain DD140 provides cost-efficient retention on disk for fast, reliable recoveries, as well as network-efficient replication of remote office data to a primary data center. Snapshot technology further enables extended local and offsite retention on disk. Tape backups at remote offices can be eliminated or centralized in one location, reducing costs and management while accelerating the return on investment.

EASY INTEGRATION WITH YOUR EXISTING INFRASTRUCTURE

The DD140 is qualified with all leading enterprise backup software and archiving applications and easily integrates into your existing storage infrastructure for remote site data protection.

Data Domain deduplication storage works with the backup packages already in use at remote and branch offices and primary data centers. This means that the lengthy and costly planning periods for implementing new software, server resources and disk targets required by competing solutions is entirely avoided when choosing the DD140 to satisfy the data protection needs of the remote sites.

EMC²
where information lives®

Remote Offices

WAN

Central Site

Data Domain DD140 Appliance
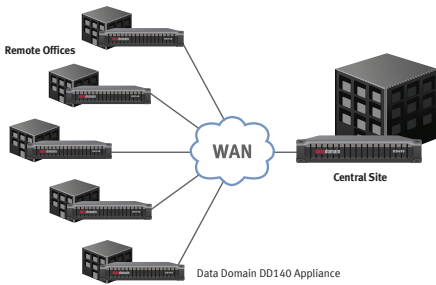
The DD140 comes equipped with EMC Data Domain Replicator software, which provides network-efficient replication so remote office data can be sent offsite over existing networks for centralized management or for disaster recovery. Tape backups can be eliminated at remote offices, reducing costs and simplifying data protection.

Installation is as easy as connecting to Ethernet. Connect the DD140 to your backup server as a NAS file server. EMC Data Domain Boost (for use with Symantec OpenStorage and EMC NetWorker) is also supported. It takes just minutes to start backing up and recovering data.

Data Domain systems can be used to efficiently store backup and archive data. This improves the efficiency across backup and archive applications and data types, as well as reduces management overhead by combining multiple applications' storage on a single system.

MULTI-SITE DISASTER RECOVERY

Replication capabilities are included as part of the core feature set of the DD140. With EMC Data Domain Replicator software, you can send remote office data offsite over existing networks, for centralized management or for disaster recovery. Multiple geographically-distributed offices can simultaneously send selected backup and archive data to this central location enabling a flexible, enterprise-wide site recovery and retention model. Cross-site deduplication further improves network efficiency by eliminating the need to transfer common data already received. If confidentiality is required, deduplicated and compressed data can be encrypted in-flight when being replicated between Data Domain systems, independently of the replication topology used.

ULTRA-SAFE STORAGE FOR RELIABLE RECOVERY

The EMC Data Domain Data Invulnerability Architecture provides the ultimate defense against data integrity issues. Continuous recovery verification continuously protects against data integrity issues during the initial backup and throughout the data lifecycle.

OPERATIONAL SIMPLICITY

Data Domain systems are simple to install and manage, resulting in lower administrative and operational costs. All Data Domain systems have an automatic call home system report-ing capability, called autosupport, which provides e-mail notification on complete system status. This non-intrusive alerting and data collection capability enables proactive support and service without administrator intervention, further simplifying ongoing management.

SPECIFICATIONS

SOFTWARE

EMC Data Domain Operating System (DD OS) 5.0 or later

Software Features

Global CompressionTM, Data Invulnerability Architecture including end-to-end verification (ongoing) and RAID 5, snapshots, telnet, FTP, SSH, e-mail alerts, scheduled capacity reclamation, Ethernet failover and aggregation, Link Aggregation Control Protocol (LACP), VLAN tagging, IP aliasing, and EMC Data Domain Replicator included; EMC Data Domain Boost, EMC Data Domain Encryption, and EMC Data Domain Retention Lock optional software

Management

EMC Data Domain Enterprise Manager, SNMP, and command line interface

Data Access

NFS v3 over TCP, CIFS, DD Boost (for use with Symantec OpenStorage and EMC NetWorker), NDMP Tape Server

REGULATORY APPROVALS

Safety: UL 60950-1, CSA 60950-1, EN 60950-1, IEC 60950-1, GS, SABS, GOST, IRAM
Emissions: FCC Class A, EN 55022, CISPR 22, VCCI, BSMI, MIC, ICES-003
Immunity: EN 55024, CISPR 24
Power Line Harmonics: EN 61000-3-2

DD140 Specifications	
Capacity, Raw[1]	1.5 TB
Logical Capacity, Standard[1,2]	9 TB
Logical Capacity, Redundant[1,3]	43 TB
Max. Throughput (Other)	450 GB/hr
Max. Throughput (DD Boost)[4]	490 GB/hr
Power Dissipation	215 W
Cooling Requirement	778 BTU/hr

1. All capacity values are calculated using Base 10 (i.e., 1 TB = 1,000,000,000,000 bytes) and the maximum raw capacity configuration.
2. Mix of typical enterprise backup data (filesystems, databases, e-mail, developer files). The low end of capacity range represents a full backup weekly or monthly, incremental backup daily or weekly, to system capacity. The top end of the range represents full backup daily, to system capacity.
3. Mix of typical enterprise data (filesystems, databases, e-mail, developer files), full backup daily, to system capacity.
4. Maximum throughput achieved using DD Boost and 1 Gb Ethernet.

HARDWARE PLATFORM

2U 19-inch, rack mountable, use in 4-post rack, hotplug disks, redundant fans, redundant power supplies, serial port, 2 copper 10/100/1000 Ethernet ports, optional dual-port copper or optical 1 Gb Ethernet and quad-port copper 1 Gb Ethernet

System Weight
42 lbs (19.1 kg)

System Dimensions (WxDxH)
19" x 22" x 3.5" (48.3 cm x 55.9 cm x 8.9 cm)

2 EIA units

Minimum Clearance
Front, with bezel closed: 1.56" (4.0 cm)
Rear: 5" (12.7 cm)

Power (VA)
100-120 / 200-240 V~, 50/60 Hz; 228 VA

System Thermal Rating
778 BTU/hr

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
6.7 BA sound power at 25°C

CONTACT US

To learn more about how EMC products, services, and solutions help solve your business and IT challenges contact your local representative or authorized reseller—or visit us at www.EMC.com