

Gateway Series

High-speed, Inline Deduplication for Third-party Storage Systems

Key Benefits

Scalable Deduplication Storage

- > Fast, inline deduplication with up to 2.7 TB/hour of throughput
- > Extended retention providing up to 1.7 PB of deduplication storage
- > 10-30x average data reduction

Easy Integration

- > Supports leading backup and archive applications from:

Symantec	EMC
HP	IBM
Microsoft	CommVault
BakBone	CA
Atempo	
- > Supports leading enterprise applications including:
 - > Database: Oracle, SAP, DB2, SQL
 - > Email: Microsoft Exchange
 - > Virtual environments: VMware
 - > Content management: Microsoft SharePoint
- > Simultaneous use of VTL, NAS and Symantec OpenStorage (OST)
- > Supports third-party enterprise storage

Multi-site Disaster Recovery

- > 99% bandwidth reduction
- > Flexible replication topologies
- > Multi-site tape consolidation
- > Remote site replication
- > Cost-efficient disaster recovery

Ultra-safe Storage for Reliable Recovery

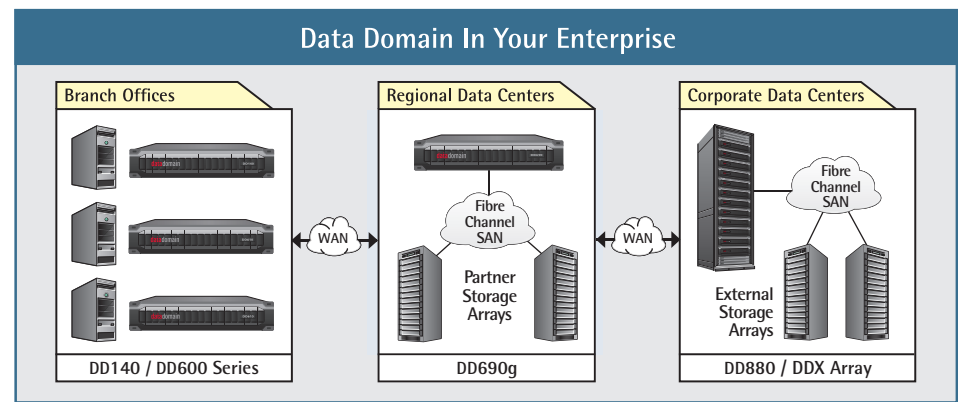
- > Continuous recovery verification
- > Continuous fault detection and healing

Operational Simplicity

- > Lower administrative costs
- > Power, cooling and space efficiencies for green operation
- > Reduced hardware footprint
- > Supports any combination of backup and archive applications in a single system

Today's traditional disk backup systems go no further than providing a front-end to a tape library infrastructure with a fast cache, temporarily alleviating backup window problems. They fail to replace tape automation technology because they lack the requisite economic and operational qualities. Traditional disk cannot cost-efficiently retain backup and archive data for any length of time, and the data is too large to be replicated over a Wide Area Network (WAN).

Data Domain, an EMC company, has revolutionized disk backup and remote office data protection with patented 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 highly efficient for network-efficient offsite replication to disaster recovery sites.



Scalable Deduplication Storage

Massive Data Reduction

The Data Domain Gateway Series offers the industry's highest throughput and most scalable deduplication storage systems for disk backup and network-based disaster recovery (DR). The Gateway Series complements the Data Domain Array Series and Appliance Series by optimizing storage capacities for environments that want to use third-party enterprise storage systems for long-term retention. Using Data Domain high-speed inline deduplication, the Gateway Series offers an average of 10-30x data reduction for enterprise recovery images, enabling cost-efficient retention on disk for high-speed and more reliable recoveries.



DD690g Gateway

Scalable Data Protection

The Gateway Series offers data protection capacities up to 1.7 PB of logical storage per gateway for a typical enterprise data set and backup policy. With its high performance system architecture Data Domain gateways

offer up to 2.7 TB/hour of throughput, significantly exceeding LTO-4 performance.

Easy Integration Into Existing Infrastructures

The Gateway Series is qualified with leading enterprise backup and archive software and with storage systems from several leading enterprise storage providers. The gateway easily integrates into the existing infrastructure without change for either data center or distributed office data protection. Use the Gateway Series to protect all enterprise application and home directory data.

Multi-site Disaster Recovery

Connect the gateway to your backup software's media server as either a file server via Ethernet, as a virtual tape library (VTL) via Fibre Channel, or via Symantec OpenStorage. It takes just minutes to start backing up and recovering data. If required, duplicate to tape using your existing software for offsite and archive support, or use Data Domain Replicator for network-efficient movement of data to another site for disaster recovery, remote office data protection or multi-site tape consolidation.

Gateway Series

High-speed, Inline Deduplication for Third-party Storage Systems

With Data Domain deduplication technology, backup data sets are effectively shrunk by 99%, to a size where network-based replication is operationally feasible.

For other data protection workloads, simply copy and paste files or use an archiving application to move data to the system.

Ultra-safe Storage for Reliable Recovery

Data Domain Data Invulnerability Architecture provides the industry's best defense against data integrity issues.

Continuous recovery verification along with extra levels of data protection continuously detect and protect against data integrity issues during initial backup and throughout the data lifecycle. Unlike any other enterprise array or file system, each gateway ensures recoverability is verified and then continuously re-verified.

Operational Simplicity

Data Domain systems are very simple to install and manage resulting in lower administrative and operational costs.

All Data Domain systems have an automatic call-home system reporting capability, called autosupport, which provides email notification of complete system status. This non-intrusive alerting and data collection capability enables proactive support and service without administrator intervention, further simplifying ongoing management.

SPECIFICATIONS	DD690g
Capacity: Raw ³	Up to 35.5 TB
Logical Capacity: Standard ^{1,3}	710 TB
Logical Capacity: Redundant ^{2,3}	1.77 PB
Maximum Throughput	2.7 TB/hr
Power Dissipation	564 W
Cooling Requirement	1925 BTU/hr

1. Mix of typical enterprise backup data (file systems, databases, mail, developer files), full backup weekly, incremental backup daily, to system capacity
2. Mix of typical enterprise data (file systems, databases, mail, developer files), full backup daily, to system capacity
3. All capacity values are calculated using Base10 (i.e., 1TB = 1,000,000,000,000 bytes)

SOFTWARE

Data Domain Operating System (DD OS) 4.7 or later

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, multi-path storage connectivity, Data Domain OpenStorage, Replicator and Retention Lock optional software

Management

Data Domain Enterprise Manager, GUI, SNMP, and command line management interface

Protocols

NFS v3 over TCP, CIFS, Symantec OpenStorage, tape library emulation (VTL) over Fibre Channel

HARDWARE PLATFORM

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

System Weight

51 lbs (23 kg)

System Dimensions (WxDxH)

19" x 29.5" x 3.5"
(48.3 cm x 74.9 cm x 8.9 cm)
2 EIA units

Minimum Clearances

Front, with Bezel: 1.56" (4.0 cm)
Rear: 5" (12.7 cm)

Power (VA)

100-120 / 200-240 V~, 50/60 Hz
564 VA

System Thermal Rating

1925 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

Max 7.0 BA, sound power at rear of unit when all drives seek simultaneously

EXTERNAL STORAGE

Interface

PCI-based Fibre Channel Fabric and Fibre Channel-Arbitrated Loop (FC-AL) / 1 to 4 Gb/sec; Redundant HBA and port connectivity

Connectivity

Direct-attached; Fibre Channel SAN fabric attached

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