

## Product Overview

### Key Benefits

#### Scalable Deduplication Storage

- > Fast, inline deduplication
- > Up to 2.7 TB/hour of aggregate throughput (43.2 TB/hour for DDX)
- > Extended retention providing up to 1.7 PB of deduplication storage (28 PB for DDX)
- > 10-30x data reduction average

#### 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)

#### Multi-Site Disaster Recovery

- > 99% bandwidth reduction
- > Flexible replication topologies
- > Multi-site tape consolidation
- > Replication from 90 remote sites (1,440 for DDX)
- > Cost-efficient disaster recovery

#### Ultra-Safe Storage for Reliable Recovery

- > Continuous recovery verification
- > Continuous fault detection and healing
- > Dual disk parity RAID-6

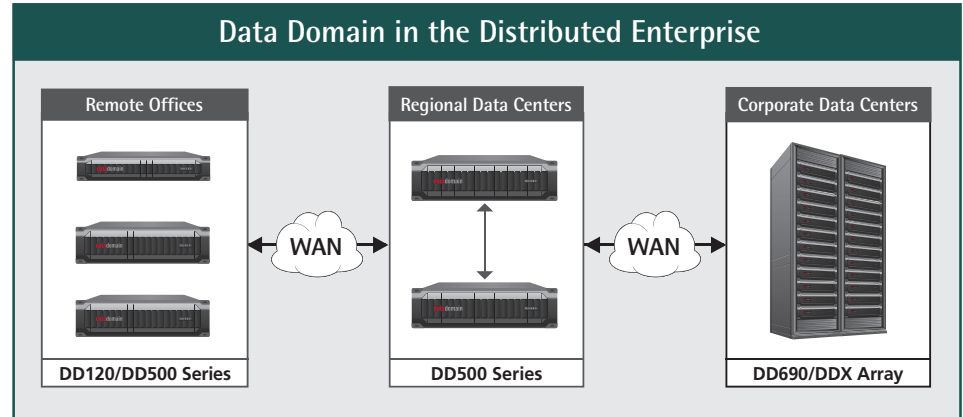
#### Operational Simplicity

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

## Deduplication Storage for the Distributed Enterprise

### Store More with Less Disk and Less Tape

Deduplication reduces the amount of disk storage needed to retain and protect data by ratios of 10-30x and greater, making disk a cost-effective alternative to tape. Data is available online and onsite for longer periods, and restores become fast and reliable. Storing only unique data on disk also means that data can be cost-effectively replicated over existing networks to remote sites for disaster recovery (DR) and consolidated tape operations.



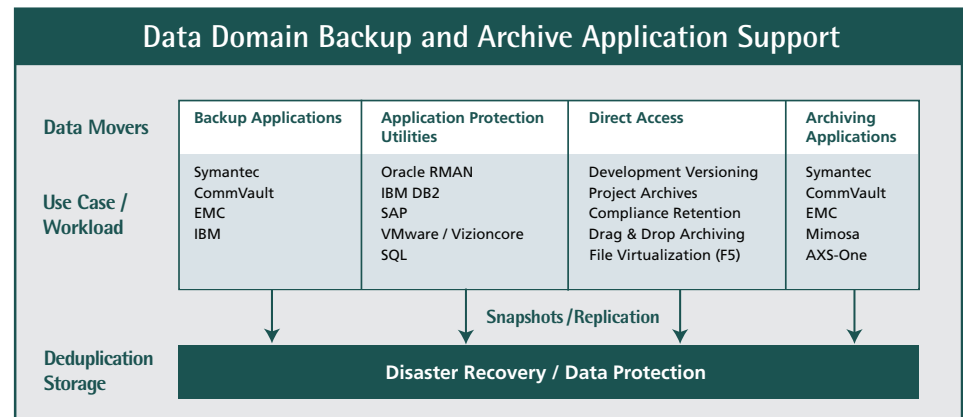
Data Domain systems provide a network-efficient solution for backup and archive across the distributed enterprise that will scale with customer retention and DR requirements.

Data Domain systems integrate easily with existing infrastructures and can be used seamlessly with a variety of data movers and application workloads.

By consolidating to a common disk-based target, you can avoid creating disparate islands of data and storage. A single Data Domain deduplication storage system can be used for backup and recovery, protection of enterprise applications (Oracle, Exchange, VMware and others), archiving and online reference storage.

Storage administration is simplified by providing direct access on disk to software development versions, 'mothballed' file systems and archives for IT governance or completed project data, for example.

Deduplication benefits are shared across each of these use cases as are the unique system resiliency, replication and disaster recovery capabilities of Data Domain deduplication storage.



Data Domain deduplication storage systems provide a single platform for backup and archive of a broad range of enterprise applications.

### Specifications



	DD120	DD510 <sup>3</sup>	DD530 <sup>3</sup>	DD565 <sup>4</sup>	DD660 <sup>4</sup>	DD690 <sup>4</sup>	DD690g Gateway	DDX Array <sup>4,5</sup>
<b>Maximum Throughput</b>	300 GB/hr	435 GB/hr	540 GB/hr	1 TB/hr	2 TB/hr <sup>6</sup>	2.7 TB/hr <sup>6</sup>	2.7 TB/hr <sup>6</sup>	43.2 TB/hr <sup>6</sup>
<b>Logical Capacity<sup>1,2</sup></b>	7-18 TB	55-135 TB	110-285 TB	320-810 TB	520 TB -1.3 PB	710 TB -1.7 PB	710 TB -1.7 PB	11.3-28 PB
<b>Raw Capacity<sup>2</sup></b>	.750 TB	Up to 3.75 TB	Up to 7.5 TB	Up to 23.5 TB	Up to 36 TB	Up to 48 TB	Up to 35.5 TB	Up to 768 TB

- Mix of typical enterprise backup data (file systems, databases, mail, developer files). The low end of capacity range represents a full backup weekly, incremental backup daily, to system capacity. The top end of the range represents full backup daily, to system capacity.
- All capacity values are calculated using Base10 (i.e., 1TB = 1,000,000,000 bytes) and the maximum raw capacity configuration.
- Includes support for 6-drive capacity expansion, available separately.
- Includes support for add-on shelves, available separately.
- Fully configured DDX Array with 16 DDX Controllers.
- Maximum throughput is achieved using OpenStorage and 10 Gb Ethernet.

### Data Domain Software

Data Domain provides software options on top of its core operating system to enable safe and reliable data protection.

**Virtual Tape Library (VTL) Software** emulates multiple tape libraries over a Fibre Channel interface, providing deduplication storage for SAN environments, complementing the default NAS interfaces.

**OpenStorage (OST) Software** enables a Symantec NetBackup 6.5 media server to manage an optimized connection between Data Domain systems and enables an administrator to control replication from the NetBackup console, complementing the default NAS interfaces.

**Replicator Software** is a network-efficient, automated, ultra-safe replication software solution available for disaster recovery, remote office data protection and multi-site tape consolidation.

**Retention Lock Software** enables users to easily implement deduplication with file locking to satisfy IT governance and compliance policies.

### Industry-Defining Technology

Data Domain technology was designed specifically to optimize the benefits of deduplication.

**Global Compression™** technology combines high-speed, inline deduplication with local compression, after a granular, variable-length segment comparison of data. Only unique segments are written to disk.

**Stream Informed Segment Layout (SISL™) Scaling Architecture** leverages the continued advancement of CPU performance to add direct benefit to system throughput scalability for inline deduplication.

**Replication Technology** transfers only the deduplicated and compressed unique changes across any IP network, requiring a tiny fraction of the bandwidth, time and cost, compared to traditional replication methods.

**Data Invulnerability Architecture** offers advanced data verification and data integrity, including RAID-6 protection. Continuous fault detection, healing, and write verification ensures that backup and archive data is accurately stored, available and recoverable.