

# DeltaStor

## Data Deduplication Software

DeltaStor® software is SEPATON's data deduplication application for SEPATON S2100®-ES2 virtual tape libraries (VTLs). This powerful, next-generation software enables you to control exponential data growth, maintain backup windows, and significantly lengthen your online retention times for faster restores and easier data access. DeltaStor software also enables you to meet green initiatives while realizing significant savings in data center space and power consumption.

### Keep More Data on Disk Longer

DeltaStor reduces capacity requirements by as much as 50:1\*, enabling you to keep more data online at a cost-per-gigabyte-stored that is comparable to physical tape. Online storage means faster restores, more data accessibility, and the ability to meet more challenging service level agreements (SLAs).

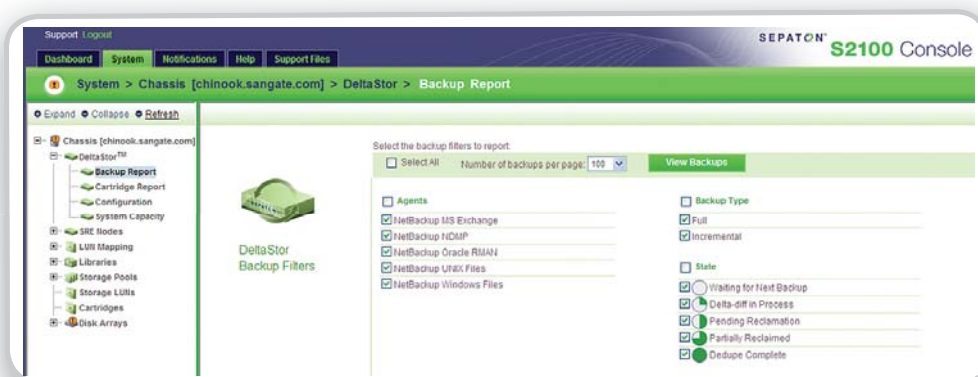
DeltaStor leverages SEPATON's patented ContentAware architecture to analyze the commonalities and relationships between the documents in each backup set. It then performs a byte-level comparison of those files to previously stored data. This process makes DeltaStor significantly more efficient at reclaiming capacity.

### Maintain Backup Windows

DeltaStor software performs data deduplication outside of the primary data path, concurrently with the backup process for industry-leading performance. This powerful multinode architecture leverages the throughput of the SEPATON S2100-ES2 to deduplicate *25 TB of data per node per day*.

### Restore Files Instantly

DeltaStor's unique forward differencing feature enables the VTL to restore data instantly. It stores a full copy of the most recent backup and replaces duplicate data in older backups with pointers to it. As a result, the VTL can restore files at wire speed with little or no reassembly.



DeltaStor software features a powerful web-based management console with user-customizable deduplication features and detailed reporting. DeltaStor gives you key information about your backup and restore processes and advanced capacity planning capabilities for maximum control of your VTL environment.

## Scale Performance and Capacity

The unique grid architecture of the S2100-ES2 enables it to scale performance and capacity independently simply by adding SEPATON replication engine (SRE®) processing nodes or disk. The S2100-ES2 delivers industry-leading backup and restore performance and up to 1.6 PB of useable capacity (before deduplication) in a single VTL. In addition, DeltaStor is the only technology that can scale deduplication processing across multiple SRE nodes for the fastest capacity recycling in the industry.

## Advanced Customization

DeltaStor enables you to select the data you want to deduplicate by application, backup server, or backup software. You can also tune deduplication by data type for optimal efficiency and to support your backup policies.

## Simplify Capacity Planning

DeltaStor gives you the information and power to control exponential data growth with ease. SEPATON S2100 VTLs feature an advanced system capacity view that gives you a variety of key metrics, including snapshots of usable disk capacity, disk space consumed, and remaining capacity. When you are nearing a preset level of capacity usage, the system automatically emails an alert notifying administrators to add capacity.

The management console also provides a graph of the actual deduplication efficiency ratio and data capacity reclaimed. Powerful reporting capabilities simplify your capacity planning.

## Reduce Space, Power Requirements

By storing more data in less space, DeltaStor software significantly lowers disk-related backup costs. For example, SEPATON S2100-ES2 VTLs with DeltaStor software uses 50-90% less power, cooling, floor space than any other disk-based solution. It also dramatically improves the overall reliability of your infrastructure by eliminating spinning disks, failed media, and many other common causes of failed backups.

## Complete Data Integrity

Before any duplicate data is deleted or space is reclaimed, DeltaStor compares deduplicated data with the full original data to ensure complete data integrity is maintained. Unlike other technologies that perform integrity checking by comparing file addresses or hash data, DeltaStor software conducts this full data comparison at the byte level to deliver complete data integrity.

\*Compression and deduplication results will vary with data type and backup methodologies used.

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